CITY OF NEW YORK
MAYOR WILLIAM O'DWYER

# WATER SUPPLY FACTS, RULES AND REGULATIONS

*Issued by the*
DEPARTMENT OF WATER SUPPLY, GAS AND ELECTRICITY

JOHN M. CANNELLA
COMMISSIONER

1948

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**1948**

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# PREFACE

This pamphlet contains a compilation of various laws, rules, regulations and facts pertaining to the distribution of the supply of water of The City of New York.

The duty of supplying the City with pure and palatable water is an Herculean task, accomplished year after year by a staff of highly trained employees. I take this opportunity to compliment them upon their splendid service to the City.

From time to time it has been necessary for this Department to call upon the public to assist it in its various programs. I am happy to state that on such occasions the public has cooperated wholeheartedly and fully.

We are at present engaged in a program of water conservation, for the dual purpose of husbanding our supply and effecting economies for the taxpayers. This is to be accomplished by discovering leaks and other conditions which affect water charges. This program is endorsed by Mayor William O'Dwyer, and he has authorized provision for an additional staff to effect this purpose.

Particular reference is placed herein on the regulations and provisions for the prevention of contamination of our water supply by reason of faulty plumbing fixtures and cross connections, which directly affect public health. Unless these conditions are located and corrected, they defeat the purpose of the great effort and expense by this Department in the mission to deliver pure and palatable water to our citizenry.

This Department has received valuable cooperation and suggestions from owners, architects, builders and others. I welcome this help and will appreciate a continuance of it in the future.

In closing, I thank Chief Engineer Tobias Hochlerner of the Bureau of Water Supply, Thomas F. Bannon, Assistant to Commissioner, Borough of Brooklyn, Deputy Commissioner Edward T. McCaffrey, and Chief Ormonde J. Burke of the Bureau of Water Register, for the thorough and competent manner in which they have compiled the material contained herein.

JOHN M. CANNELLA

Commissioner.

## INFORMATION FOR PUBLIC AS TO WATER BILLS AND PERMITS.

Water rents which include annual water bills, charges for water supplied by meter measurement, charges for installation of or repairs to water meters, installation of meter glasses, and transfer of house service pipe connections to new water mains are billed by and payable to the Bureau of City Collections, Department of Finance, in the borough in which the property is located. Any other charges in connection with the water service are billed by and payable to the Department of Water Supply, Gas and Electricity.

Any information desired as to particulars of water rents, meter and meter repair charges, and transfer of house service pipe connections to new water mains, billed by the City Collector, should be obtained from the office of the Water Register of the Department of Water Supply, Gas and Electricity in the borough in which the property is located.

The rates and charges for the supply of water, the annual service charges and minimum charges, rules and regulations concerning the use of water, and all other rules and regulations affecting users of water, or concerning charges for the supply of water, or restrictions for the use of water, installation of meters, penalties and fines for violations of rules and regulations, and transfer of house service pipe connections to new water mains, continue under the jurisdiction of the Department of Water Supply, Gas and Electricity.

Permits for use of water for building purposes, and permits for use of water through hose, pipe, or other fixtures for washing street, sidewalk, areaway, steps, building or other place or thing, for the use of water for garden or lawn, for the installation of water fixtures or air conditioning apparatus; repair or installation of a tap, private main, service, curb valve, meter or its connections, use of electrical tap indicator or hydrant, hydrant flow or pressure test and thawing service pipes, are issued in the Bureau of Water Register in the borough in which the property is located.

Permits for use of water for shipping are issued only in the Manhattan office of the Bureau of Water Register. Such permits are issued for periods of one month or multiples thereof; none will be issued for parts of a month, nor will extensions of time be allowed for boats that may be out of service, and no unexpired permits will be transferred to other boats.

## OFFICES OF THE DEPARTMENT

Information relating to matters concerning the department can be obtained at the following offices:

Manhattan, Municipal Building .....WOrth 2-4320
The Bronx, Bergen Bldg., Tremont and Arthur Avenues .....TRemont 8-5400
Brooklyn, Municipal Building .....TRiangle 5-7100
Queens, Borough Hall, Kew Gardens .....BOulevard 8-5000
Richmond, Borough Hall, St. George, S. I.....ST. George 7-0840

Corps of men are attached to each of the following stations to attend to the repair of water mains and hydrants:

### Manhattan Headquarters

*High Pressure Fire System Repair Co., 226 West Broadway.
*South Manhattan Repair Co. (Battery to 23rd St.), 28 Vandewater St.
*Central Manhattan Repair Co. (23rd to 86th St.), 24th St. and Ave. A.
*North Manhattan Repair Co. (86th St. to Harlem River), 60 W. 133rd Street.

### The Bronx

*South Bronx (West of Bronx River, South of Tremont Ave.), 3494 Park Avenue.
*North Bronx (West of Bronx River, North of Tremont Ave.), 415 E. 203rd St.
East Bronx (East of Bronx River), 940 Zerega Ave.

### Brooklyn

*Central Station, 356 Flushing Avenue.
*Coney Island, Avenue V and East 14th Street.
East New York, 137 Jamaica Avenue.
Western Station, 226 Nevins Street.

### Richmond

*North Shore, 1336 Castleton Avenue, West New Brighton.
South Shore, Ontario Avenue, Sunnyside.
Tottenville, 182 Joline Avenue, Tottenville.

### Queens

1st Ward Repair Co., Dreyer Ave. and 43rd St., Long Island City.
*2nd Ward Repair Co., Barnwell Ave. and Poyer St., Elmhurst.
3rd Ward Repair Co., 171st St. & Pidgeon Meadow Road.
*5th Ward Repair Co., 20-16 Nameoke Ave., Far Rockaway.

NOTE: The telephone numbers of the above headquarters may be obtained by consulting the appropriate Telephone Directory.

LEAKS. If you notice a leaking hydrant or escape of water from a street main or roof-tank, please telephone to the nearest of the above headquarters of the Department. In this way the proper distict foreman will be notified and action taken.

At each of the headquarters marked with an asterisk (*), corps of repair men are maintained at all times, night or day including holidays and Sundays.

## SOURCES OF WATER SUPPLY AND OTHER ITEMS OF INTEREST PERTAINING TO THE WATER SUPPLY OF NEW YORK CITY

The City of New York now has available the following sources of water supply:

(a) **Schoharie Creek,** in the Catskills, where the run-off from 314 square miles of watershed, is collected in the Schoharie Reservoir having an available capacity of 19,583,000,000 gallons. From Schoharie Reservoir the water is diverted through the 18.1 mile Shandaken Tunnel to the Esopus Creek in the Esopus Watershed.

(b) **Esopus Creek,** in the Catskills, where the run-off from 257 square miles of watershed, together with the supply from Schoharie Watershed is collected in Ashokan Reservoir having an available storage capacity of 130,478,000,000 gallons. From Ashokan Reservoir the water is conveyed through 77 miles of aqueduct to Kensico Reservoir in the Bronx and Byram Watershed. The dependable supply of the Schoharie and Esopus watersheds, or, in other words, the amount of water that can be reasonably depended upon during years of low rainfall is 525,000,000 gallons daily.

(c) **Rondout Creek,** also in the Catskills, where the run-off from 95 square miles of watershed is diverted as stream flow through a temporary emergency connection to the Delaware Aqueduct at Lackawack and conveyed to West Branch Reservoir in the Croton Watershed, a distance of about 45 miles. Here it intermingles with the water of the West Branch Watershed (part of the Croton Watershed) and is then conveyed through the Delaware Aqueduct to Kensico Reservoir, a distance of about 22 miles. The character of the temporary construction at Lackawack limits the flow from Rondout Creek to a maximum of about 300,000,000 gallons daily, but the dependable supply of Rondout Creek in a dry period, assuming that its water were stored in West Branch Reservoir, is about 35,000,000 gallons daily.

(d) **Bronx and Byram Rivers** in Westchester County, where the run-off from 22 square miles of watershed is collected in the enlarged Kensico Reservoir, having an available capacity of 30,573,000,000 gallons. (Kensico Reservoir is part of the Catskill and Delaware Systems, and serves to provide additional storage for Catskill and Rondout water). The dependable supply of the Bronx and Byram Watersheds is about 10,000,000 gallons daily. From Kensico Reservoir water is conveyed through the Catskill and Delaware Aqueducts to Hillview Reservoir, (just north of the City line and 15 miles from Kensico Reservoir,) which holds 929,000,000 gallons of water. Hillview Reservoir serves to equalize the difference between the hourly use of water in the City and the steady flow in the aqueducts. From Hillview Reservoir the two City Tunnels deliver the water to the five boroughs by gravity, i.e., the water flows into the distribution mains under such pressure that it generally need not be pumped before it reaches the consumer. Since the Catskill system is the least expensive of the Municipal systems to operate, it is generally used to the full capacity of the Catskill Aqueduct.

(e) **Croton River,** in Putnam and Westchester Counties, where the water from 375 square miles of watershed is collected in twelve reservoirs and six controlled lakes having a combined available storage capacity of 103,075,000,000 gallons. The estimated reasonably dependable yield of the Croton system is 315,000,000 gallons daily.

Croton water is delivered to the Boroughs of Manhattan and Bronx by gravity, but all of it excepting approximately 125,000,000 gallons daily must be pumped within the borough limits to reach the higher ground elevations. The pumped supply is used in the Washington Heights section of Manhattan and in the Intermediate Service areas of Manhattan and the Bronx, to supplement the Catskill supply.

(f) **Ridgewood and Brooklyn Borough Watersheds** on the south side of Long Island, where water is obtained from small surface streams, and from infiltration galleries and driven wells. The estimated yield of these watersheds as at present developed is about 90,000,000 gallons daily, all of which must be pumped. The Ridgewood and Brooklyn Borough supplies are used in the Brooklyn low service areas to supplement the Catskill supply.

(g) **Borough of Queens,** where water is obtained from driven wells, within the borough limits. The estimated yield of the Queens Municipal system as at present developed is about 10,000,000 gallons daily. The Queens pumped supply is used locally to maintain adequate pressures and to supplement the Catskill supply.

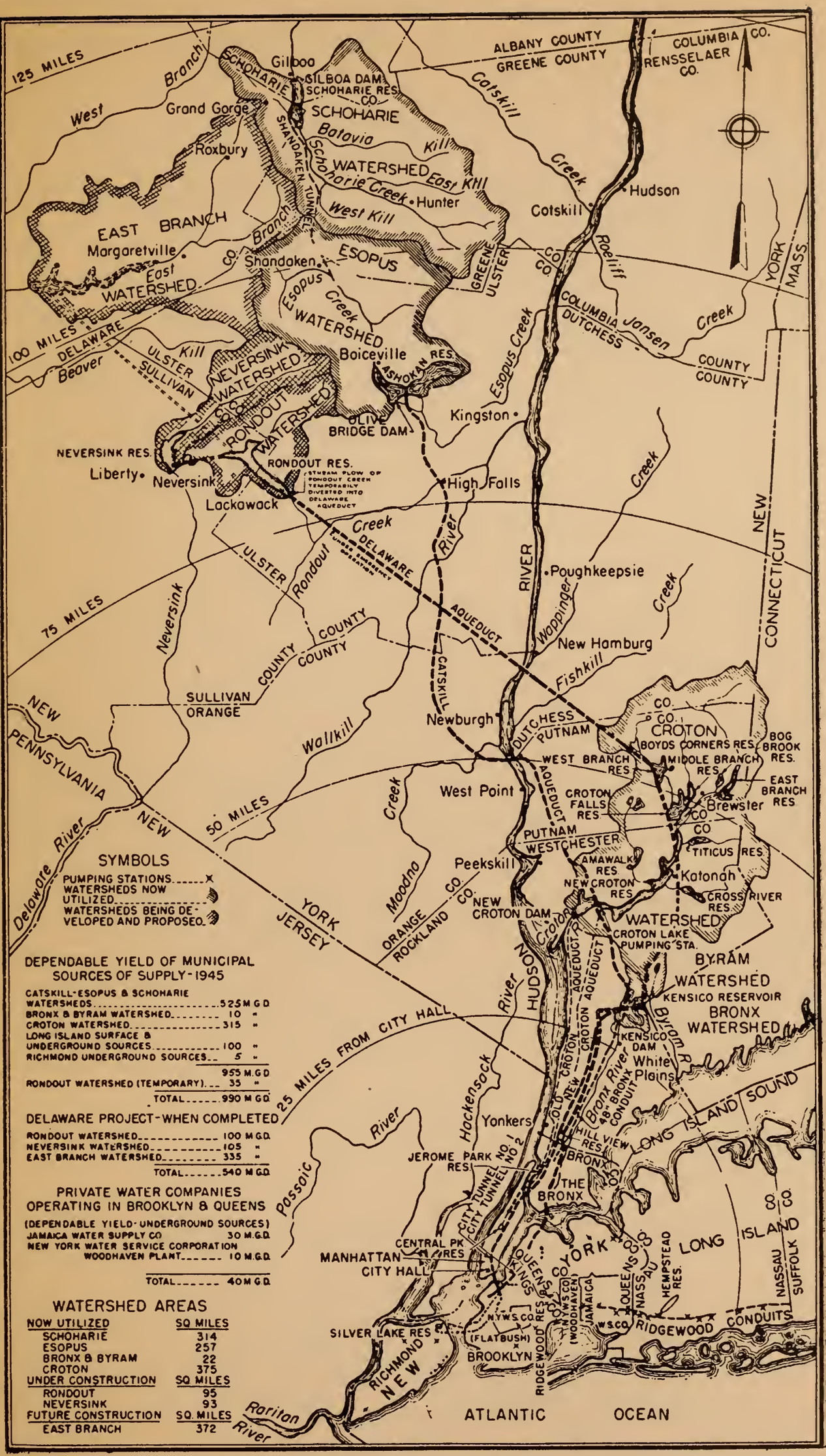
(h) **Borough of Richmond,** where water is obtained from driven wells, the Richmond system yields about 5,000,000 gallons daily. It is used to supplement the Catskill supply.

**(i) Private Water Companies.** In addition to the municipal sources of supply some 42,000,000 gallons daily are supplied by private water companies operating in the Borough of Queens. Until July 1, 1947 an additional 26,000,000 gallons daily were supplied to the Twenty-ninth Ward (Flatbush) in Brooklyn by the New York Water Service Corporation. On that date the City acquired the distribution system of the Company, by condemnation, and began furnishing water to the area from the municipal system. In Queens, the Jamaica Water Supply Company and the New York Water Service Corporation (Woodhaven Plant) furnish water for the Fourth Ward. All of the private water companies draw their supply from driven wells. They are under the general supervision, regulation and control, except as to rates, of the Commissioner of Water Supply, Gas and Electricity.

**Quality of Water:** The City makes unremitting effort to keep the water free from pollution. An inspectional force under a sanitary expert is engaged in patrolling the watersheds to see that the department's sanitary regulations are observed. Samples taken daily from various points in the water supply system are examined and analyzed at the three laboratories maintained by the Department. All water before delivery to the distribution mains is treated with chlorine to destroy bacteria. In addition the Catskill water is aerated to free it from gases and in some cases from microscopic organisms. Generally microscopic organisms which develop in the reservoirs and at times impart an unpleasant taste and odor to the water, though

in no sense harmful to health, are destroyed by treatment with copper sulfate and by chlorine dosage. None of the supplies is filtered, but the quality of the water supplied by the City is excellent for all purposes, and it is clear and wholesome.

Dirt in the water is usually caused by iron rust and other sediment in the street pipes, house pipes or tanks, being stirred up by unusually large drafts from mains, such as is caused by opening a street hydrant.


125 MILES
West Branch
Gilboa
SCHOHARIE
GILBOA DAM
SCHOHARIE RES.
SCHOHARIE CO.
Grand Gorge
Roxbury
SCHOHARIE WATERSHED
Schoharie Creek
Hunter
Batavia Kill
East Kill
West Kill
SHANDAKEN TUNNEL
EAST BRANCH
Margaretville
East WATERSHED
Shandaken
ESOPUS WATERSHED
Esopus Creek
Boiceville
ASHOKAN RES.
100 MILES
DELAWARE
Beaver Kill
ULSTER
SULLIVAN
NEVERSINK WATERSHED
RONDOUT WATERSHED
NEVERSINK RES.
Liberty
Neversink
RONDOUT RES.
STREAM FLOW OF RONDOUT CREEK TEMPORARILY DIVERTED INTO DELAWARE AQUEDUCT
Lackawack
OLIVE BRIDGE DAM
Kingston
High Falls
ALBANY COUNTY
GREENE COUNTY
COLUMBIA CO.
RENSSELAER CO.
Catskill Creek
Hudson
Cotskill
GREENE CO.
ULSTER CO.
Roeliff Jonsen Creek
COLUMBIA
DUTCHESS
COUNTY
COUNTY
YORK
MASS
Esopus Creek
Rondout Creek
DELAWARE AQUEDUCT
CATSKILL AQUEDUCT
HUDSON RIVER
Poughkeepsie
Wappinger Creek
New Hamburg
Fishkill Creek
NEW CONNECTICUT
75 MILES
Neversink
Rondout Creek
ULSTER COUNTY
SULLIVAN COUNTY
ORANGE COUNTY
NEW PENNSYLVANIA
Wallkill
Newburgh
DUTCHESS CO.
PUTNAM CO.
CROTON
BOYDS CORNERS RES.
BOG BROOK RES.
WEST BRANCH RES.
MIDDLE BRANCH RES.
EAST BRANCH RES.
Brewster
CROTON FALLS RES.
West Point
50 MILES
Delaware River
NEW YORK JERSEY
Moodna Creek
PUTNAM CO.
WESTCHESTER CO.
TITICUS RES.
AMAWALK RES.
Peekskill
Katonah
NEW CROTON RES.
CROSS RIVER RES.
ORANGE CO.
ROCKLAND CO.
NEW CROTON DAM
Croton R.
WATERSHED
CROTON LAKE PUMPING STA.
BYRAM WATERSHED
KENSICO RESERVOIR
BRONX WATERSHED
Byram R.
KENSICO DAM
White Plains
Hudson River
25 MILES FROM CITY HALL
Hackensack River
Bronx River
48" BRONX CONDUIT
OLD CROTON AQUEDUCT
NEW CROTON AQUEDUCT
LONG ISLAND SOUND
Yonkers
HILL VIEW RES.
BRONX CO.
JEROME PARK RES.
NO. 1
NO. 2
CITY TUNNEL
THE BRONX
Passaic River
CENTRAL PK RES.
MANHATTAN
CITY HALL
QUEENS CO.
KINGS CO.
YORK CO.
QUEENS CO.
NASSAU CO.
LONG ISLAND
HEMPSTEAD RES.
NASSAU CO.
SUFFOLK CO.
JAMAICA
NYWS CO. (WOODHAVEN)
NYWS CO. (FLATBUSH)
RIDGEWOOD RES.
RIDGEWOOD
CONDUITS
SILVER LAKE RES.
BROOKLYN
RICHMOND
NEW
Raritan River
ATLANTIC OCEAN
SYMBOLS
PUMPING STATIONS X
WATERSHEDS NOW UTILIZED
WATERSHEDS BEING DEVELOPED AND PROPOSED
DEPENDABLE YIELD OF MUNICIPAL SOURCES OF SUPPLY-1945
CATSKILL-ESOPUS & SCHOHARIE WATERSHEDS 525 M G D
BRONX & BYRAM WATERSHED 10 "
CROTON WATERSHED 315 "
LONG ISLAND SURFACE & UNDERGROUND SOURCES 100 "
RICHMOND UNDERGROUND SOURCES 5 "
955 M.G.D
RONDOUT WATERSHED (TEMPORARY) 35 "
TOTAL 990 M G D
DELAWARE PROJECT-WHEN COMPLETED
RONDOUT WATERSHED 100 M G D
NEVERSINK WATERSHED 105 "
EAST BRANCH WATERSHED 335 "
TOTAL 540 M G D
PRIVATE WATER COMPANIES OPERATING IN BROOKLYN & QUEENS
(DEPENDABLE YIELD-UNDERGROUND SOURCES)
JAMAICA WATER SUPPLY CO 30 M.G.D.
NEW YORK WATER SERVICE CORPORATION WOODHAVEN PLANT 10 M.G.D.
TOTAL 40 M G D
WATERSHED AREAS
NOW UTILIZED SQ MILES
SCHOHARIE 314
ESOPUS 257
BRONX & BYRAM 22
CROTON 375
UNDER CONSTRUCTION SQ MILES
RONDOUT 95
NEVERSINK 93
FUTURE CONSTRUCTION SQ MILES
EAST BRANCH 372

**Consumption of Water:** The average daily amount of water, in million gallons, supplied to the city from the various sources of supply during the year 1947 was as follows:

| Borough | Catskill | Croton | Ridgewood and Brooklyn Borough | Queens Sources | Rich-mond Sources | Private Water Com-panies | Total |
|---|---|---|---|---|---|---|---|
| Manhattan and Bronx | 300.0 | 306.6 | .... | .... | .... | .... | 606.6 |
| Brooklyn | 297.6 | .... | 40.0 | .... | .... | 15.1 | 352.7 |
| Queens | 128.1 | .... | .... | 4.3 | .... | 43.0 | 175.4 |
| Richmond | 22.6 | .... | .... | .... | 1.7 | .... | 24.3 |
| City | 748.3 | 306.6 | 40.0 | 4.3 | 1.7 | 58.1 | 1159.0 |

Based on an estimated population of 7,861,000, the per capita consumption was 147.4 gallons daily.

**Water Supplied to Communities Outside of the City:** Under laws passed in 1905, 1916 and 1928 a number of communities and institutions, mostly in Westchester County, augment or obtain their entire supply from the Catskill and Croton aqueducts. During the year 1947, an average of 30,400,000 galions daily were supplied by the City of New York to communities outside the City limits.

**Distributing System:** The Municipal supply is distributed in the different boroughs through a network of mains ranging in size from 4 inches to 72 inches and totaling 5,060 miles in length. The distributing system is controlled by 143,514 valves. Connected with the mains are over 678,186 service connections through which water is drawn as needed by the consumers.

**Pressure:** The City is not legally required to deliver water at a pressure greater than is necessary to carry water into the basements of houses. Effort is made, however, to maintain a pressure sufficient to raise water to the levels of top floors of buildings of average height.

**High Pressure Fire System:** For fire fighting purposes, in addition to the 77,797 fire hydrants connected with the distribution mains, the city has three independent high pressure fire service systems, comprising five pumping stations, 178 miles of distribution mains, 4,258 hydrants, and 6876 valves. These high pressure systems cover the high value business sections in Manhattan and Brooklyn, and the amusement parks in Coney Island.

**Metering:** Under existing laws the Commissioner of the Department has authority to cause water meters to be installed in business premises only. The law, however, gives the owner of a lot or premises the right to apply for a meter. At present, substantially all water used for commercial and industrial purposes is metered. On December 31, 1946 there were 177,925 meters in use. Water used for domestic purposes that is not metered is sold on the frontage or flat rate basis.

**Cost of Water Works:** The construction cost of the Municipal works to June 30, 1946 was $748,216,313.34. The cost of operation and maintenance of the system for the fiscal period July 1, 1945 to June 30, 1946 was $7,922,819.07; Interest and Sinking Fund charges amounted to $30,107,283.98. The total revenue for the year 1946 from the sale of water amounted to $43,098,884.28.

## Scope of Activities

The work incident to the care, operation and development of the Municipal water supply system is confined by statute to the Department of Water Supply, Gas and Electricity. At the head of the department is a Commissioner appointed by the Mayor. It has four operating bureaus, the largest of which is the Bureau of Water Supply. At its head is a Chief Engineer appointed by the Commissioner and responsible to him for the operation and maintenance of the water system. Of the 2,592 employees of the Department, 1,922 are attached to the Bureau of Water Supply.

All construction work pertaining to the development of large additional sources of water supply, such as the Delaware development, is usually assigned to the Board of Water Supply, a separate organization. As such work is completed it is transferred to the Department of Water Supply, Gas and Electricity for maintenance and operation.

The Delaware project, now under construction, includes the development of the Rondout Creek, a tributary of the Hudson River, and the taking of part of the flood waters of the tributaries of the Delaware River. It is estimated that the first stages of this development, which will make available 170,000,000 gallons of water daily, will be completed about 1952. The entire development will add 540,000,000 gallons daily to the available sources.

## WATER WASTE FACTS

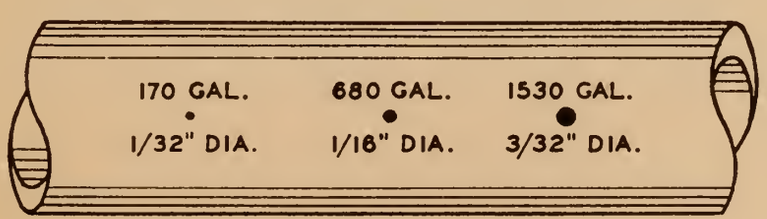
Each citizen of New York must either directly or indirectly, whether his supply is metered or not, pay towards the cost of water. That is, water wasted even by consumers whose places are not metered becomes a burden on them through the necessity for increased taxation. The active co-operation on the part of consumers to check the waste of water would help to reduce this expenditure and will be of great general benefit to the City.

When closing your house for any period of time see that the water is turned off to insure against a leak occurring during your absence.

Consumers should inspect their meters frequently to guard against leaks which are often the cause of water bills being larger than the consumer expects.

To determine the presence of hidden leaks consumers should occasionally close all outlets and observe the meter to see if it registers or not.

GALLONS LOST IN 24 HOURS AT AVERAGE CITY PRESSURE




THE SMALLEST OPENING LOSES MORE PER DAY
THAN THE AVERAGE PERSON USES PER DAY

Do not neglect leaking toilets, for a leaky toilet will waste from $12. to $500. worth of water a year. This leak may occur without being visible, but can be detected by listening on the pipe leading from the tank or on the tank itself.

If care is exercised when installing piping, to keep the hot water and cold water pipes at least a foot apart, it will be unnecessary to let a faucet run to get a cool drink.

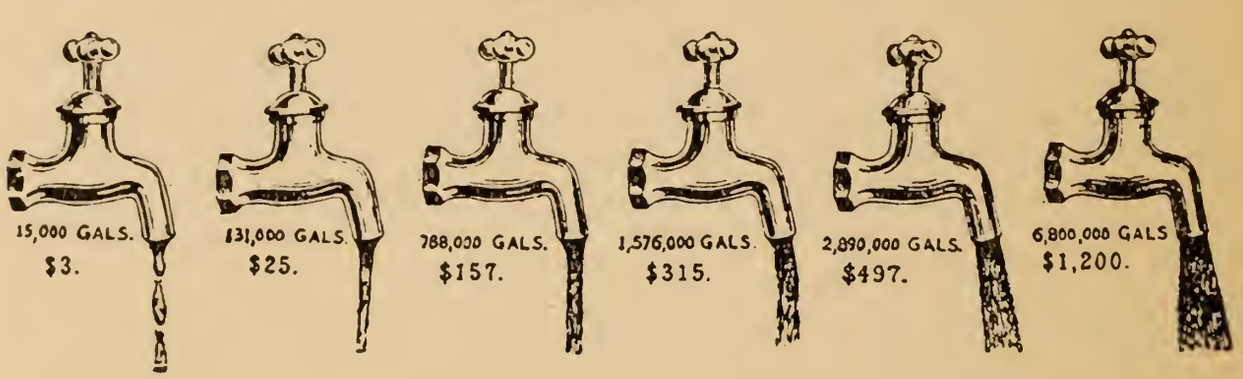
Do not allow roof tanks to overflow. This is a very important source of water waste and can be eliminated by providing tanks with ball cocks.

Some consumers leave the faucets open on cold nights to prevent freezing of water pipes. This is a violation of the Department rules. Pipes should be properly protected and the City water saved.

If consumers notice that their meters are damaged or not registering, they may save themselves much trouble and the necessity for the averaging of bills over long periods of time, if they will report the fact immediately to the Bureau of Water Register.

Consumers will save themselves expense by taking precautions to keep their meters protected from dirt and damage.

ILLUSTRATIONS OF WATER WASTE — WHAT LEAKS AND CARELESSNESS COST PER ANNUM



## CONSERVE OUR WATER SUPPLY

The City charges for metered water $1.50 per 1,000 cubic feet.

Meters will be installed and repaired by City Plumbers on the failure of property owners to have this work done within the time specified by Department orders. The cost of such work will become a lien upon the property.

**If Your Bills Seem Too High Look For Water Waste**

## HOW TO READ A WATER METER AND ASCERTAIN IF IT IS REGISTERING

1. Before attempting to read a water meter, see that it is registering. To do this you must turn on the water. If the meter is registering, the pointer on the lowest dial will move; if it does not move under these conditions, you should notify the Water Department at once.

2. Commence reading the meter by noting carefully the value of the unit in which the dial reads. This is indicated by each dial. These figures indicate the value of one complete revolution of the pointer; therefore, each division of a dial represents one-tenth of the amount marked against each dial. It should further be noted that one complete revolution of a pointer of any dial is equal to one division of the dial of next higher value.

3. Care must be taken to note the direction of movement of the pointers which rotate on alternate dials in opposite directions on most meters.

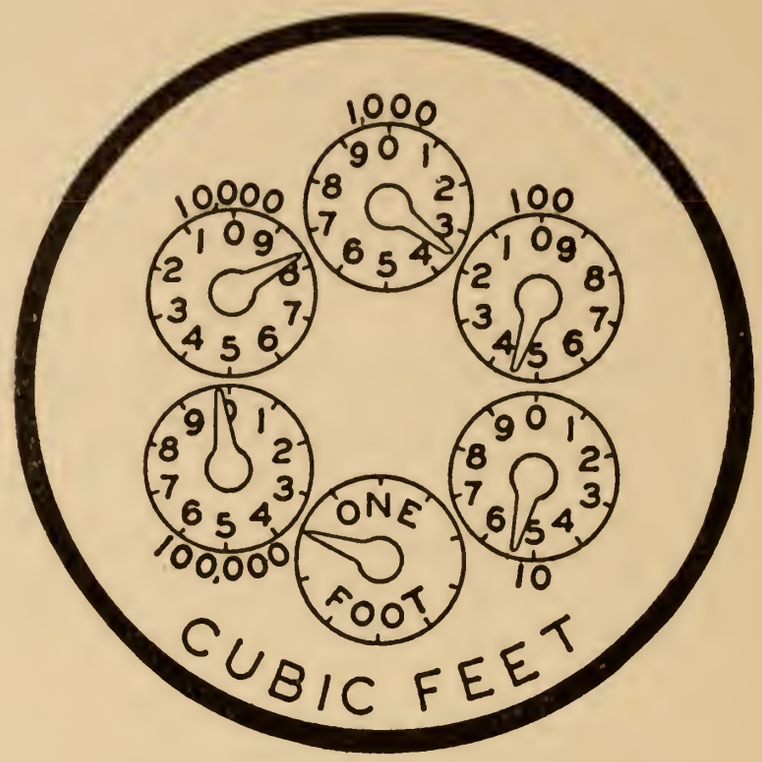
4. Read the dials commencing with the one marked 10 and continue in the order shown by figures on outside of each dial, setting down the figures as read, i.e., the reading of the 10 dial in the units column; that of the 100 dial in the tens column, etc.

5. Always set down the figure, on each dial, that has been passed last or is just covered by the pointer.

6. When the meter has registered its full capacity, that is, one complete revolution of the highest dial, it returns to 0 and starts again. Whenever this happens, place in front of the reading of all the dials, the figure 1. You must do this in order to obtain the present reading.

7. Subtract from the present reading the previous reading and calculate the difference at fifteen cents (15 cents) per 100 cubic feet, and you have the amount of your bill in dollars and cents.

There are two types of meter dials. One a direct reading dial which needs no instruction. The other is shown below:




| | | | |
|---|---|---|---|
| Dial | 10 | Reads | 5 |
| " | 100 | | 40 |
| " | 1,000 | | 300 |
| " | 10,000 | | 8,000 |
| " | 100,000 | | 90,000 |
| The reading is | | | 98,345 cu. ft. |

## Chapter 30

## DEPARTMENT OF WATER SUPPLY, GAS AND ELECTRICITY

Department; commissioner

Sec. 731. There shall be a department of water supply, gas and electricity the head of which shall be the commissioner of water supply, gas and electricity who shall be appointed by the mayor.

Deputies

Sec. 732. The commissioner may appoint two deputies.

Offices

Sec. 733. The department shall maintain a main office in one borough and an office in each other borough.

Jurisdiction

Sec. 734. Except as otherwise provided in this charter or by statute, the department shall have judisdiction, charge and control:

1. Of all structures and property connected with the supply and distribution of water for public use not owned by private corporations, including all fire and drinking hydrants and all water meters.

2. Of furnishing the water supply and maintaining its quality, and of the investigation for and the construction of all works necessary to deliver the proper and required quantity of water with ample reserve for contingencies and future demands.

3. Of making and enforcing rules and regulations governing and restricting the use and supply of water.

4. Of making rules and regulations, subject to the approval of the board of estimate, fixing uniform annual charges and extra and miscellaneous charges for the supply of water, meter rates and minimum charges for the supply of water by meter, annual service charges and charges for meters and their connections and for their setting, repair and maintenance and charges for water where a meter shall fail to register correctly or shall cease to record the flow of water or where a meter shall have been removed, and in cases in which no fines are fixed by provision of law, of fixing and collecting fines for violations of rules and regulations; but no fines shall be imposed against any property unless notice be mailed addressed to the owner at the property, or if his name be unknown, then to the 'owner or occupant" thereof and a hearing be given.

5. Of furnishing the city or any part thereof, by contract or otherwise, with gas, electricity or any other illuminant or steam; of the selecting, locating, removing and changing of lights for the use of the city; of inspecting and testing gas and electricity used for light, heat and power purposes, electric, gas and steam meters, electric wires and all lights furnished to the city; of the use and transmission of gas, electricity, pneumatic power and steam for all purposes in, upon, across, over and under all streets, roads, avenues,

parks, public places and public buildings; of the construction of electric mains, conduits, conductors and subways in any such streets, roads, avenues, parks and public places, and the granting of permission to open streets, when approved by the borough president, and to open the same for the purpose of carrying on therein the business of transmitting, conducting, using and selling gas, electricity or steam or for the service of pneumatic tubes. This section shall not be construed to empower the commissioner to grant permission to open or use the streets except by persons or corporations otherwise duly authorized to carry on business of the character above specified.

6. Of the inspection and testing of wiring and appliances for electric light, heat and power in or on any building or structure in the city.

7. Of the examination and licensing of competent persons to be electricians and motion picture machine operators and of the establishment of grades or divisions among electricians.

Sec. 735. **Interest in manufacture of gas, etc., and certain acts by officers, etc., of department prohibited.** No officer, agent or employee of the department shall in any way, directly or indirectly, be interested pecuniarily in the manufacture or sale of gas or of electricity or steam, or of gas or electric or steam meters, or of any article or commodity used by gas or electric companies, or used for any purpose for the consumption of gas or of electricity or steam, or in or with a gas or electric or steam company; and no such officer, agent or employee shall give certificates or written opinions to a maker or vendor of any such article or commodity.

Sec. 736. **Private Companies.** The commissioner is hereby authorized to examine into the sources of water supply of any private water companies supplying the city or any portion thereof or its inhabitants with water, to see that the same is wholesome and the supply is adequate and to establish such rules and regulations in respect thereof as are reasonable and necessary for the convenience of the public; and the commissioner may exercise superintendence, regulation and control in respect to the supply of water by such water companies.

## ADMINISTRATIVE CODE OF THE CITY OF NEW YORK

Sec. 415 (1)-4.0 **Bureau of City Collections; additional duties.** The duties of such bureau shall also include the collection of water rents, charges, fines and penalties in connection with the water supply, including arrears, revenue accruing from rents, interest on bonds and mortgages, and revenue arising from the sale of property belonging to or managed by the city. It shall also be the duty of such bureau to collect rental for the temporary use and occupation of property acquired by the city for public purposes between the time of the acquisition thereof and the time when the same can be actually utilized for the purposes for which it was acquired, and for the use of all property which, having been originally acquired for public purposes, has ceased to be used for such purposes.

Sec. 415 (1)-7.0 **When taxes, assessments and water rents to be liens on lands assessed.** All taxes and all assessments and all water

rents, and the interest and charges thereon which may be laid or may have heretofore been laid, upon any real estate now in the city, shall continue to be, until paid, a lien thereon, and shall be preferred in payment to all other charges. The words "water rents" whenever they are used in this title shall include uniform annual charges and extra and miscellaneous charges for the supply of water, charges in accordance with meter rates and minimum charges for the supply of water by meter, annual service charges and charges for meters and their connections and for their setting, repair and maintenance, penalties and fines, and all lawful charges for the supply of water. Charges for expenses of meters, their connections, setting, repair, or maintenance shall not be due or become a charge or lien on the premises where a water meter shall be installed or against which a charge shall be made, until such charge shall have been definitely fixed by the Commissioner of Water Supply, Gas and Electricity, and an entry of the amount thereof shall have been made with the date of such entry in the book in which charges for water supplied by meter against such premises are to be entered. A charge in accordance with meter rates or minimum charge for the supply of water measured by meter, and a service charge shall not be due or become a lien or charge upon the premises where such meter is installed until an entry shall have been made indicating that such premises are metered, with the date of such entry in the book in which the charges for water by meter measurement against such premises are to be entered. Whenever an increase in the amount of uniform annual charge or extra or miscellaneous charge shall have been made or a charge shall have been made for water for any building completed subsequent to the first day of January in each year, the amount of such increase of the charge or new charge for such new building shall not be due or become a lien or charge against the premises until the amount thereof shall have been entered with the date of such entry in the book in which the uniform annual charges and extra or miscellaneous charges against such premises are to be entered.

Sec. 415 (1)-16.0 **Water charges to be transmitted to Bureau of City Collections.** The Commissioner of Water Supply, Gas and Electricity shall cause to be transmitted to the Bureau of City Collections an account of all water rents, charges, fines and penalties as the same become due or accrue.

Sec. 415 (1)-17.0 **Water rents; when payable; penalty for non-payment.** Uniform annual water charges and extra and miscellaneous charges for water not metered and annual service charges and minimum charges shall be due and payable in advance on the first day of January in each year, if entered. If such charges are not paid to the city collector within thirty days thereafter, it shall be the duty of the city collector to charge, collect and receive interest thereon at the rate of seven per cent per annum to be calculated to the date of payment from the date when such charges become due and payable. If not so entered and payable, but entered at any time subsequent thereto, they shall be due and payable when entered and notice thereof shall be mailed within five days of such entry to the premises against which they are imposed addressed to either the owner or the occupant and if not paid on or before the last day of the month

following the month of entry, it shall be the duty of the city collector to charge, collect and receive interest thereon at the rate of seven per cent per annum to be calculated to the date of payment from the date of entry. All charges for meters and their connections and for their setting, repair and maintenance, and all charges in accordance with meter rates for supply of water measured by meter shall be due and payable when entered, and notice therefor shall be mailed within five days of such entry stating the amount due and the nature of the charge to the last known address of the person whose name appears on the record of such charges as being the owner, occupant or agent or, where no name appears, to the premises addressed to either the owner or the occupant, and if not paid on or before the last day of the month following the month of entry, it shall be the duty of the city collector to charge, collect and receive interest thereon at the rate of seven per cent per annum to be calculated to the date of payment from the date of entry.

Sec. 415 (1)-18.0 **Notice of rules and regulations; penalty for non-payment; water supply cut off.** The rates and charges for supply of water, the annual service charges and minimum charges, the rules and regulations concerning the use of water and all other rules and regulations affecting users of water or concerning charges for supply of water, restrictions of the use of water, installation of meters, penalties, and fines for violations of rules and regulations shall be printed on each bill and permit so far as in the judgment of the Commissioner of Water Supply, Gas and Electricity they are applicable. This section and such printing and the printing of this section on such bills and permits shall be sufficient notice to owners, tenants or occupants of premises to authorize the imposition and recovery of any charges, and fines imposed under such rules and regulations and of any penalties imposed in pursuance of this act in addition to cutting off the supply of water. Where charges payable in advance are not paid within the period covered by such charges and a notice of such non-payment is mailed by the department to the premises addressed to "owner or occupant," the commissioner may shut off the supply of water to such premises. Where charges not payable in advance have been made by the department and remain unpaid for more than thirty days after notice thereof mailed to the premises addressed to "owner or occupant," the commissioner may shut off the supply of water to the premises.

Sec. 415 (1)-19.0 **Enforcement of collection of water rents.** Water charges, penalties and fines shall after they are payable to the city collector be enforced, if not paid, by a sale of tax lien against the property upon which they are imposed. In addition to collecting water rents, charges, penalties and fines by sale of tax lien, the city may maintain an action for their recovery against the person for whose benefit or by whom the water is taken or used.

Sec. 734 (1)-1.0 **Commissioner: duty in regard to sources of water supply and property of department.** It shall be the duty of the commissioner to preserve the purity of all waters from which any part of the city water supply is drawn, and to protect such supply and the lands adjacent thereto from injury or nuisance. He shall maintain, preserve and repair all structures and all other property connected with the water supply.

Sec. 734 (1)-2.0 **Protection of water supply; certain acts misdemeanors.**

a. It shall be unlawful for any person to throw or deposit, or cause to be thrown or deposited any dead animal or other offensive matter or anything whatever in either of the reservoirs or in any lake, pond or stream, or in any aqueduct or pipe from or through which the water supply of the city shall be drawn.

b. Any person violating the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine or imprisonment, or both, in the discretion of the court. Such fine shall not exceed the sum of one hundred dollars, and such imprisonment shall not exceed a period of three months. Such imprisonment shall be in the jail of the county in which the offense shall have been committed.

Sec. 734 (1)-2.1 **Injury to water supply property.** If any person shall willfully do or cause to be done any act by which any work, materials or property now or hereafter erected or used within the city or elsewhere by such city, or any person acting under their authority, for the purpose of procuring or keeping a supply of water shall in any manner be injured or shall erect or place any nuisance on the banks of any river, lake or stream from which the water supply of such city shall be drawn, such person on conviction thereof, shall be deemed guilty of a misdemeanor.

Sec. 734 (1)-2.2 **Pollution of or interference with water supply.** It shall be unlawful, within the city, to bathe in or go into the water of any water supply reservoir or any part of a city aqueduct, or to throw stones, chips or dirt or any other material or substance whatever into any gate-house, ventilator, fountain or basin. It shall also be unlawful to injure or disfigure any part of the water works system of the city.

Sec. 734 (1)-3.0 **Trespass on water supply property.** It shall be unlawful to enter or remain on any part of the embankment of a water supply reservoir within the city without permission of the comisssioner, or to fail or refuse to comply with the rules and regulations of the commissioner as to when citizens shall leave such embankment, or the grounds or buildings attached thereto.

Sec. 734 (1)-4.0 **Hydrants to be kept closed.** The commissioner shall cause all water supply hydrants within the city to be kept closed. Except in case of fire and for the purpose of extinguishing the same, or when otherwise authorized by law, it shall be unlawful to take or use the water from any such hydrant.

Sec. 734 (1)-5.0 **Opening, tampering with or operating valves or fire hydrants.**

a. It shall be unlawful for any person other than an employee of the department of water supply, gas and electricity, or the fire department to open, use, operate or tamper with a fire hydrant or high pressure hydrant, in the city, or a valve in the water supply system of the city, without previous permission in writing from the commissioner of water supply, gas and electricity. It shall also be

unlawful to leave such a hydrant open for a longer period than shall be limited in the permission, or use water for other purposes than shall have been authorized by such commissioner.

b. Any person who shall violate, or refuse or neglect to comply with any provision of this section shall, upon conviction thereof, be punished by a fine of not more than one hundred dollars, or by imprisonment not exceeding thirty days, or by both; and any such person shall, also, for each offense, be subject to the payment of a penalty in the sum of fifty dollars, to be recovered in a civil action brought in the name of the commissioner.

Sec. 734 (1)-6.0 **Connections.** It shall be unlawful, within the city, to open any street, bore any pipe, or make connection with any main or pipe for water supply purposes, except under the direction of the commissioner.

Sec. 734 (1)-7.0 **Closing of taps before building is demolished.** It shall be unlawful to demolish any building in the city without first having obtained a permit from the department providing for the withdrawal of existing taps supplying the premises, in the manner specified in the permit.

Sec. 734 (1)-8.0 **Obstruction of stop-cocks.** It shall be unlawful for any person to obstruct access to a stop-cock connected with a water pipe in the city, or to permit any person in his employ to do so.

Sec. 734 (1)-9.0 **Public wells.** It shall be unlawful to dig a well in any street or public place in the city, and the president of the borough in which any such well shall be dug shall cause it to be filled in, in all cases.

Sec. 734 (1)-11.0 **Right of entry on lands dedicated for highway or park purposes.**

a. The department shall at all times have the unqualified right to enter upon all lands transferred or dedicated under the provisions of chapter six hundred sixty of the laws of nineteen hundred twenty-one, for highway or park purposes, to make repairs, replacements, additions, alterations or extensions to its water mains, pipes or works and for any other use of the property necessary to the purposes for which it was originally acquired, without applying for or obtaining the consent of any other authority. The department shall rebuild and replace any part of the road bed thus destroyed or torn up for water supply or incidental purposes, and restore it to a condition satisfactory to the authority having jurisdiction thereover.

b. All owners of property adjacent to such strip dedicated for highway purposes shall have a right of way over every part of such land so dedicated.

Sec. 734 (1)-14.0 **Violations.** Any person who shall violate any provisions of sections 734 (1)-2.2 through 734 (1)-4.0 and 734 (1)-6.0 through 734 (1)-9.0 of the code, upon conviction thereof, shall be punished by a fine of not more than fifty dollars, or by imprisonment for not exceeding thirty days, or both.

Sec. 734 (3)-1.0 **Sale of water; license.** It shall be unlawful for any person, except when licensed by the commissioner, to take water from any hydrant or water connection erected, or to be erected in

the city, and attached to the water pipes, to be used on any boat, vessel, barge or pile-driver, or to be sold or offered for sale to the owner of any boat, vessel, barge, or pile-driver.

Sec. 734 (3)-2.0 **Use of water through hose.** It shall be unlawful for any person to wash any street, sidewalk, areaway, steps, building or other place in the city by means of hose or piping, or to use water through hose or sprinkler for watering lawns or gardens, or to operate any outside shower where the water runs upon a street, sidewalk, or other public place, unless and until a permit therefor shall have been obtained from the Department of Water Supply, Gas and Electricity. Such permit shall not be granted for the use of hose, sprinkler or outside shower between the first day of November and the last day of March following.

Sec. 734 (3)-3.0 **Violations.** Any person who shall violate any provision of the two preceding sections shall, upon conviction thereof, be punished by a fine of not more than ten dollars, or imprisonment for not exceeding ten days, or both.

Sec. 734 (4)-1.0 **Water meters: when to be placed.**

a. The commissioner is authorized to install or cause to be installed water meters, the pattern and maximum price of which shall be approved by the board of estimate in any or all stores, workshops, hotels, lodging houses, factories, office buildings, and public edifices, at wharves, ferry houses, and stables, and in all places in which water is furnished for business consumption. When authorized thereto by resolution of the board of estimate or by local law, the commissioner may install such meters in any or all multiple dwellings, and he shall install such meter or meters or cause them to be installed upon written demand of the owner of any lot or premises to which such water is supplied.

b. Thereafter, as shall be determined by the commissioner, the department shall make out all charges for water furnished by the department to such premises in ratable proportion to the water furnished, as ascertained by meter, subject to such minimum and service charges as may be established. All expense and cost of meters, and their connections, and of their setting, repair and maintenance, unless with the approval of the board of estimate such expense and cost be borne by the department, shall be a charge and lien upon the premises.

c. This section shall not, however, be constructed so as to remit or prevent the due collection of arrearages or charges for water consumption heretofore incurred, nor interfere with the proper liens therefor, nor of charges, or rates, or liens hereafter to be incurred for water consumption in any building or place which may not contain one of the meters aforesaid. The moneys collected for service charges and for expense and cost of meters and their connections, and for setting, repairing, maintaining and replacing the same, may be applied by the commissioner to the payment of expenses incurred in procuring meters and their connections and in their setting, repair, maintenance and replacement.

Sec. 734 (4)-4.0 **Penalty for waste of water.** The commissioner is authorized to prescribe a penalty or fine, not exceeding the sum

of five dollars, for each offense for permitting water to be wasted and for any violation of such reasonable rules as he may from time to time prescribe for the prevention of the waste of water. Such fine shall be added to the water rents, but when imposed against any property, notice thereof shall be mailed by the department to the property, addressed to the owner or where his name is unknown to "owner or occupant," and a hearing afforded.

Sec. 734 (4)-5.0 **Charges not to be affected.** Nothing contained in Sections 734 (4)-2.0 through 734 (4)-4.0 of the code shall be construed to prevent the imposition of charges in accordance with schedules, rules or regulations heretofore adopted or the performance of any act required or authorized under such schedules, rules or regulations or under the provisions of sections 734 (4)-2.0 through 734 (4)-4.0, 415 (1)-17.0 and 415 (1)-18.0 of the code, nor to affect or invalidate charges heretofore imposed, or hereafter to be imposed as herein provided, nor to prevent the due collection of such charges or interfere with the liens thereof.

Sec. 734 (4)-6.0 **Connection charges.** All persons contracting for a supply of water within the city, shall pay the cost of the materials and labor used and expended in the streets, necessary to make the connection with the conduit pipes, as required by the rules and regulations of the commissioner.

Sec. 734 (4)-6.1 **Transfer of house service pipe connection to new water main.**

a. In instances where the city has laid a water main in a street where surface grades have been established but where the surface has not been improved to the established grade and when a new water main is installed by the city because it is required by the grading of such street to the established grade, the commissioner shall issue an order directing the owner of each house which was directly connected with the main as previously laid, to transfer the house service pipe connection to the new main, at the expense of such owner when required in accordance with the rules and regulations of the commissioner.

b. When a new water main is installed by the city to replace a private main, the commissioner shall issue an order directing the owner of each house fronting on the city main and receiving water from such private main to transfer the house service pipe connection to the city main, at the expense of such owner and in accordance with the rules and regulations of the commissioner.

c. An order issued pursuant to this section shall be served upon the owner of the premises, by registered mail sent to the address registered by such owner in the bureau of city collections in the department of finance, or if no address is registered in such bureau, by registered mail sent to the last known address of such owner, or to the address of such owner as shown on the records in the office where conveyances of real property are recorded pursuant to law.

d. If the transfer is not made within ten days after the mailing of such order, the department may make such transfer through its officers, agents or contractors. The owner shall be personally liable for the expenses and disbursements incurred by the department in

making such transfer. The amount of such expenses and disbursements shall be due and payable when definitely fixed by the commissioner and entered upon the records in the office of the city collector. A notice stating the amount due and the nature of the charge shall be mailed by the city collector within five days after such entry to the address registered by such owner in the bureau of city collections in the department of finance, or if no address is registered in such bureau, to the last known address of the owner of such property or to the address of such owner as shown on the records in the office where conveyances of real property are recorded pursuant to law. If such amount is not paid on or before the last day of the month following the month of entry, it shall be the duty of the city collector to charge, collect and receive interest thereon at the rate of seven per cent per annum to be calculated to the date of payment from the date of entry. The amount of such expenses and disbursements and the interest thereon shall be a lien upon the premises for which the transfer of the house service pipe connection was made, and shall be enforced and collected in the manner provided in title A of chapter seventeen of this code for the enforcement and collection of water rents and the lien thereof.

Sec. 734 (4)-7.0 **Report of receipts by clerk in Bureau of Water Register.** The clerk of the bureau of water register assigned to collecting, on each day, except Sunday of each week, shall render to the comptroller an account, under oath, of all moneys received by him, showing the amounts received from all classes of revenue, and shall, thereupon, pay over the amounts so received to the treasurer, furnishing to the comptroller a receipt showing the payment of such sums into the city treasury.

Sec. 755 (1)-2.0 **Flushing or washing streets; water.** Whenever the commissioner of water supply, gas and electricity shall determine that there is a sufficient supply of water for the purpose, he may permit the commissioner of sanitation and the person or persons to whom a contract for the sprinkling, flushing or washing of the public streets has been awarded to use as much water as may be necessary for the flushing or washing of the public streets. Every such contractor shall be required to pay the city, through the Department of Water Supply, Gas and Electricity, for the use of such water, at current rates.

Sec. 82d7-1.0 **Posting.** It shall be unlawful for any person to paste, post, paint, print or nail any handbill, poster, notice, sign or advertisement upon any curb, gutter, flagstone, tree, lamp-post, awning post, telegraph pole, barrel, box or hydrant in any street.

Sec. 82d7-2.0 **Protection of city advertisements.** It shall be unlawful for any person to tear down, deface or destroy any notice, handbill or poster, put up or posted by or under direction of the council, or by or under the direction of any other city agency.

Sec. 82d7-3.0 **Violations.** Any person convicted of a violation of any of the provisions of sections 82d7-1.0 or 82d7-2.0 of the code shall be punished by a fine of not more than ten dollars, imprisonment for not more than ten days, or both.

Sec. 487b-3.0 **Obstruction of fire hydrants.** It shall be unlawful in any manner to obstruct the use of any fire hydrant, or to allow

any snow or ice to be thrown or piled upon or around the same, or to place, or allow to be placed, any material or thing in front thereof, from the curb line to the center of the street and to within ten feet from either side thereof. All snow and ice accumulating in the street, within such space, shall be removed by the owner, lessee, or tenant of the premises fronting such space. All material or things found obstructing any fire hydrant may be forthwith removed by the officers or employees of the department, at the risk, cost and expense, of the owner or claimant. The commissioner shall take all proper measures to keep fire hydrants from freezing, and in proper condition for use at all times.

Sec. C26-1223.0 **Water Supply.** Every structure intended for human occupancy shall be provided with a supply of pure and wholesome water. It shall be unlawful to connect such pure water supply with any unsafe water supplies or to cross connect such pure water supply to any drainage system. Every structure shall be provided with a supply of water sufficient to keep the plumbing fixtures sanitary. Where supply from water mains in the street is available, each such structure shall be adequately supplied with water from such mains.

Sec. C26-1277.0 (h) **Anti-siphon devices.** Wherever the supply to a fixture is introduced into such fixture below the overflow level, such supply shall be provided with an approved vacuum breaker which will prevent the siphoning of water from such fixture into the supply piping.

## PENAL LAW

Sec. 1432. **Unlawful interference with water meters, water service pipes, and their connections.**

A person who wilfully, with intent to injure or defraud:

1. Breaks or defaces, or causes to be broken or defaced, the seal of a water meter; or,

2. Obstructs, alters, injures or prevents, or causes to be obstructed, altered, injured or prevented, the action of any such meter or other instrument used to measure or register the quantity of water supplied to or consumed by any person, corporation or company; or,

3. Makes or causes to be made any connection by means of pipe, conduit or otherwise with the water main or service pipe of any person, corporation or company furnishing water to consumers, in such manner as to take water from said main or service pipe without its passing through the meter, or other instrument provided for registering or measuring the amount or quantity of water taken from said main or service pipe; or,

4. Makes any connection or re-connection with the water main or service pipe of any person, corporation or company furnishing water to consumers, or turns on or off, or in any manner interferes with any valve, stop-cock or other appliance belonging to said person, corporation or company, without obtaining from such person.

corporation or company a written permit to make such connection or reconnection or to turn or otherwise interfere with said valve, stop-cock or other appliance; or,

5. Prevents, by the erection of any device or construction, or by any other means, free access to any such meter by the person, company or corporation furnishing such water; or interferes, obstructs or prevents by any means, the reading or inspection of such meter, is guilty of a misdemeanor.

# BOARD OF STANDARDS AND APPEALS RULES RELATIVE TO SUBMERGED INLETS AND PROTECTIVE METHODS TO BE APPLIED TO PREVENT CONTAMINATION OF WATER SUPPLY

(Adopted by the Board of Standards and Appeals February 3, 1939, effective in accordance with Section 666, Paragraph 2, of the New York City Charter, February 27th 1939, as amended December 4, 1942, effective December 28, 1942, as amended September 10, 1946, effective October 7, 1946.
**(835-38-SR)**

Authority:

Pursuant to the authority vested in the Board of Standards and Appeals by Section 666, paragraph 2 of the New York City Charter pertaining to Sections C-26-1268.0,c,4 and C26-1277.0h. of the Administrative Building Code.

**Rule 1. Vacuum Breakers.**

All vacuum breakers prescribed under these rules shall be set at least four inches above the flood level rim of fixtures or as otherwise specifically provided for in these rules. Each fixture with submerged inlets shall be independently controlled by an approved vacuum breaker or breakers the full size of supply pipe, as set forth in these rules. All hose coupling outlets and serrated tip outlets for hose connections within buildings are deemed to be submerged inlets, and shall be independently protected with an approved vacuum breaker. Outside hose coupling outlets for garden or sidewalk use and hose connections on fire fighting equipment are excepted.

**Rule 2. Submerged Inlets.**

Water supply inlets to fixtures shall be located at least one inch above the flood level rim of the fixture, except when submerged inlets are absolutely essential for the proper functioning of a fixture, or as otherwise provided for in these rules.

Water supply lines to water preheating apparatus utilizing waste water shall be equipped with an approved vacuum breaker located at least four feet above the highest elevation of the preheating apparatus or coil with a check valve between the vacuum breaker and the preheating apparatus. Any hot water boiler supplied through such preheating device and having an independent cold water supply line shall have the cold water supply line equipped with a vacuum breaker and check valve located at least four inches above the highest elevation of the boiler.

**Rule 3. Flush-Valve Fixtures.**

Flush-valve controlled fixtures, with submerged inlets supplied directly or indirectly from the City Water Supply System, shall

be equipped with an approved vacuum breaker in the supply line not less than four inches above the flood level rim of the fixture.

**Rule 4. Ballcocks.**

All flush tanks operated by ballcocks shall have an approved vacuum breaker located not less than three-quarter inch above the overflow outlet of the flush tank.

Ballcocks controlling water supply to suction, roof or other intermediate tanks shall be located at least one inch above the flood level rim of the tank excepting that in roof tanks equipped with an overflow of a size at least one commercial diameter larger than the water supply pipe, the ballcock may be located two inches above the highest elevation of the overflow pipe. The overflow and emptying pipes of roof, suction and intermediate tanks shall not be directly connected to a drainage system, notwithstanding the permissive provisions of Section C26-1273.0, d, of the Administrative Building Code for connection to a leader.

**Rule 5. Sterlizers.**

Direct water supply connections to all sterilizers are prohibited, except such equipment as is approved by the Board. When approved sterilizers are used, the waste piping from sterilizers shall not connect directly with any drainage system.

**Rule 6. Aspirators—Water Siphons.**

Direct water supply connections to aspirators, water siphons or similar apparatus is prohibited except when approved by the Board. The waste pipe for this type of apparatus shall not connect directly with any drainage system.

**Rule 7. Bidets—Bed Pan Washers.**

Direct water supply connections to a bidet is prohibited. Water supply connection to bed pan washers or similar apparatus shall be equipped with an approved vacuum breaker and check valve, the latter located between the fixture and the vacuum breaker. Water supply to bed pan washers equipped with an approved flush valve shall be governed by Rule 3.

Bed pan washers may be equipped with steam connections only when such equipment has been approved by the Board.

**Rule 8. Sump or Well Pumps.**

Direct water supply connections for priming purposes to sump, well or similar type pumps when permitted by the Department of Water Supply, Gas and Electricity shall be connected to the inlet side of the pump and be equipped with an approved vacuum breaker and check valve, the check valve to be located between the pump and the vacuum breaker.

**Rule 9. Condensers.**

Direct water connection to refrigeration unit for cooling purposes shall be equipped with an approved check valve to prevent possible backflow of ammonia or other refrigerant from defective condenser coils or jackets, except in such installations where the water supply piping is entirely outside of the piping or tank containing the

refrigerant and two independent wall thicknesses of metal separate the refrigerant from the city water supply. Refrigeration units containing more than twenty pounds of refrigerant shall be provided with an additional safeguard in the form of an approved relief valve installed at the outlet side of the check valve, such relief valve being set at five pounds above the maximum water pressure at the point of installation. Direct water connection is prohibited under Section C26-1223.0 Administrative Building Code.

**Rule 10. Mortuary, Dissection, Operating and Embalming Tables or Equipment.**

Mortuary, dissection, operating and embalming tables or equipment shall have no direct water supply connection. Hose used with such equipment shall terminate at least 12 inches at any point from the table or attachments.

**Rule 11. Dishwashing and Laundry Machines.**

Direct water supply to dishwashing and laundry machines shall be equipped with an approved vacuum breaker and a check valve located between the vacuum breaker and the fixture. The vacuum breaker shall be located at least 4″ above the highest elevation of the machine.

**Rule 12. Chemical Solution Tanks or Apparatus.**

Direct water supply connections, when permitted by the Department of Water Supply, Gas and Electricity, to any tank or apparatus containing any chemical shall be equipped with an approved vacuum breaker and a check valve located between the vacuum breaker and the tank or apparatus.

**Rule 13. Steam Tables.**

Steam tables used exclusively for the warming of food stuffs and provided with a water supply inlet elevation at least one inch above the overflow outlet, the area of which is at least four times that of the water supply piping, shall be equipped with an approved horizontal swing check valve in the water supply piping.

Where elevation of the water supply piping inlet is less than one inch above the overflow outlet, or when the area of the overflow outlet is less than four times that of water supply piping, the water supply piping shall be equipped with an approved vacuum breaker located at least four inches above the maximum overflow level of the fixture.

Sec. 61A. **Cleaning or Painting Water Tanks.**

(a) No water tank of any kind which is part of a building water supply system used for domestic purposes shall be cleaned with any material or painted on the inside in any manner that will affect the taste or potability of the water supply when tank is put into service. The water supply connections to and from a tank shall be disconnected or effectually plugged while the tank is being cleaned or painted, to prevent any foreign fluid or substance from entering the distribution piping. Where the air in a tank may be inadequate to sustain human life, or may contain an injurious gas, adequate measures shall be taken for the protection of the workman.

(b) After the tank has been cleaned or painted it shall be disinfected as follows before it is put back in service:

(1) the inner side of the top, bottom and walls shall be washed with a hypochlorite solution containing 25 or more parts per million of available chlorine; (2) the tank shall be filled with water to which hypochlorite solution is added during the filling in sufficient quantity so that the treated water in the tank will contain at least 10 parts per million of available chlorine; (3) the chlorinated water shall be allowed to remain in the tank for two hours; (4) finally, the tank shall be drained completely before refilling.

Sec. 168. **Water From Wells; The Use Thereof Regulated and Restricted.**

Water from wells in the Borough of Manhattan shall not be used in The City of New York, for drink; nor shall water from wells in the Borough of Manhattan be used for any other purpose in any tenement, lodging-house, hotel, manufactory, or building, in which persons are living or employed, or in which there are offices, or a restaurant or saloon in The City of New York, without a permit therefore issued by the Board of Health or otherwise than in accordance with the terms of said permit and the Regulations of the said Board. Water from wells in the other Boroughs of said City, other than the public water supply, shall not be used in any tenement or lodging-house, hotel, manufactory, or building in which persons are living or employed, or in which there are offices, or a restaurant, or saloon without a permit therefor issued by the Board of Health or otherwise than in accordance with the terms of said permit and the Regulations of the said Board.

## REGULATIONS GOVERNING USE OF WELL WATER FOR BATHING, FLUSHING, COOLING OR DOMESTIC PURPOSES.

### Regulation 1. Analysis of Water.

No permit shall be issued, except after an analysis and examination of a sample of the well water and a favorable report shall have been rendered thereon by the Department of Health. Every such permit shall state specifically the purpose or purposes for which the water may be used.

### Regulation 2. Protection from Surface Water.

Suitable means shall be employed and proper precautions taken to prevent surface water from entering wells.

### Regulation 3. Wells Near Cesspool or Privy Vault.

No well shall be maintained within fifteen feet of any cesspool or privy vault, and no leaching cesspool or privy vault, or other source of contamination shall be maintained within three hundred feet of a well or where there is danger of such well water becoming contaminated from such leaching cesspool or privy vault, or other source.

### Regulation 4. Danger Sign to Be Posted.

A sign with the words, **"Danger—This Well Water Not to Be Used for Drinking or Domestic Purposes,"** clearly, legibly and prominently displayed thereon, shall be securely fastened or attached to every pump, tap or outlet connected with any well, the water from which is used for other than drinking or domestic purposes.

### Regulation 5. Removal of Danger Signs Prohibited.

No person, excepting a duly authorized representative of the Department of Health shall remove or deface or mutilate any sign fastened or attached to any pump, tap or outlet connected with any well, as provided for in Regulation 4 of these Regulations.

### Regulation 6. Connections.

Well water shall not be connected with any other water supply.

### Sec. 170. Addition of Chemicals to Water Supply in Buildings Regulated; Permit Required.

(a) No person shall in the City of New York add, or engage in or by a sign or otherwise advertise or hold himself out as engaged in the business of adding, any chemical or other substance to the water supply within a building without a permit therefor from the Commissioner of Health. Such addition of chemicals shall be for anti-corrosion or anti-scaling purposes only, and shall be performed in conformity with the terms and conditions of said permit and the regulations of the Board of Health. No owner, lessee, occupant, tenant, or other person in charge of a building shall cause, permit,

allow or suffer any chemical or other substance to be added to the water supply in such building which water supply is subsequently furnished to any guest, customer, occupant, tenant, or other person for domestic use or human consumption, unless such addition or treatment is performed by the holder of a permit from the Commissioner of Health and in accordance with the regulations of the Board of Health. The provisions of this section shall not apply to the treatment of water for industrial purposes, for swimming pools, for air conditioning systems, or for any use which does not include human consumption, but in all such cases proper precaution shall be taken to preclude the possibility that the treated water may come into contact with or contaminate the potable water supply distribution system of the building and provisions satisfactory to the Department of Water Supply, Gas and Electricity shall be made to preclude the possibility that the treated water may come into contact with or contaminate the public water supply.

(b) Only the following chemicals or mixtures thereof may be added to the water supply in a building:

| | |
|---|---|
| Sodium silicates | Sodium phosphates |
| Sodium carbonate | Calcium carbonate |
| Sodium bicarbonate | Calcium bicarbonate |
| Sodium hydroxide | Calcium hydroxide |

None of these chemicals shall be added in such manner as to increase the total alkalinity, total hardness or total silica content of the water by more than 50 parts per million as determined by the methods of water analysis contained in the latest edition of "Standard Methods of Water Analysis" approved by the American Public Health Association and the American Water Works Association.

(c) Addition of chemicals to the water supply in a building for anti-corrosion or anti-scaling purposes shall only be made by means of an approved mechanical device or apparatus designed and constructed to regulate the chemical dosage to conform with the provisions of this section. Such mechanical devices or apparatus shall be examined and if found satisfactory shall be approved by the Board of Standards and Appeals. The applicant shall designate, by calendar number of the Board of Standards and Appeals, the approved device which will be used or file an application with said Board for approval of the device intended for use.

(d) Where a person or company is engaged in work covered by both Sections 170 and 170A of the Sanitary Code, a single permit only will be required.

**Regulation 1. Application for Permit.**

An application for a permit to engage in the business of adding chemicals to the water supply in a building for anti-corrosion or anti-scaling purposes, shall be made to the Commissioner of Health on forms furnished for such purpose by the Department of Health.

**Regulation 2. Required Qualification of Applicant.**

A permit to add chemicals to the water supply in buildings for anti-corrosion or anti-scaling purposes, shall be issued only to per-

sons holding a chemical degree or a degree in chemical or sanitary engineering, from a college or university approved by the Regents of the University of the State of New York, and having at least five years' experience in some work closely related to the chemistry of water. If the applicant for a permit is a partnership, at least one member thereof, or if a corporation, at least one officer thereof, must possess the aforesaid qualifications. In addition thereto such partner or officer must be engaged for full time in said partnership or corporation respectively, and have direct charge and supervision over all installations and activities in relation to the addition of chemicals to a water supply in a building.

**Regulation 3. Chemical Laboratory.**

A holder of a permit shall maintain at all times a suitable chemical laboratory equipped to analyze water in accordance with the standard method of water analyses approved by the American Public Health Association, and the American Water Works Association, for the following ingredients:

Calcium
Magnesium
Acidity
Silica
Iron
Zinc
Copper
Phosphates
Alkalinity to methyl orange
Alkalinity to phenolphthalein
Free carbon dioxide
Hydrogen ion concentration
Hardness

**Regulation 4. Responsibility of Permittee.**

The permittee shall at all times be held strictly responsible for the installation and maintenance of the mechanical device and for the addition of chemicals to the water supply in a building serviced by him. He may, however, delegate the actual addition of chemicals, the servicing of the mechanical device, and other related activities, to a qualified employee-operator, but such delegation shall not relieve the permittee from responsibility hereunder.

**Regulation 5. Installations.**

The mechanical device shall be so installed and located that it be at all times fully protected from tampering, exposure to any insanitary conditions, or the possibility of contamination. The storage of chemicals for use with the mechanical device shall be in metal containers kept locked at all times, and such containers clearly marked to indicate that they hold chemicals for the treatment of the water supply.

**Regulation 6. Report of Installation and Servicing.**

Where a permittee has installed a mechanical device or where a permittee is servicing a mechanical device installed by one other than the permittee, the permittee shall within 24 hours after such installation, and in the latter case within 24 hours after the commencement of such servicing, file a report with the Department of

Health, on a 5″ x 8″ white or manila colored card, containing the following:

a. Address of premises.
b. Owner of premises.
c. Description of premises.

In the case of installation—

d. The undersigned has on ..... 19.... installed at the aforesaid premises a mechanical device for the addition of chemicals to the water supply. Board of Standards and Appeals Calendar Number ..... and will service said device with ..... .....
(Name of chemical or chemicals).

Where the mechanical device to be serviced has been installed by one other than this permittee—

e. The undersigned has on ..... 19.... commenced servicing the mechanical device heretofore installed at the aforesaid premises with ..... .....
(Name of chemical or chemicals).
f. Permit Number .....

.....
(Name of Permittee)
Dated: ....., 19.... (If corporation or partnership).
BY.....

**Regulation 7. Samples of Water.**

The permittee at the time of the commencement of servicing, and at least once a month thereafter, shall take samples of the water as it enters and after leaving the device and analyze such samples for increase in alkalinity, total hardness, silica and phosphates as required. These reports of analyses shall be kept on file, separately for each building, under street address, in the office of the permittee for a period of two years and shall be open for inspection by a representative of the Health Department.

**Regulation 8. Discontinuance of Use of Mechanical Device.**

Where the servicing of a mechanical device for the addition of chemicals to the water supply has been discontinued, it shall be the duty of the owner, lessee, or other person in charge of the building, to cause the device to be wholly disconnected from the water supply system and all openings therein properly sealed.

**Regulation 9. Revocation of Permit.**

The Commissioner of Health may suspend or revoke a permit issued hereunder for cause; and may, after a hearing, revoke the approval of the mechanical device or apparatus theretofore found satisfactory, if he believes the health and safety of water consumers require such action.

Sec. 170A. **Commercial Treatment of Water Coils and Tanks; Permit Required.**

No person, in the City of New York, other than a licensed master plumber, shall engage in, or by a sign or otherwise, advertise or hold

himself out as engaged in the business of cleansing or descaling water coils, or cleansing, descaling or painting the inside of water tanks, which are part of a building water supply system used for domestic consumption, without a permit therefor issued by the Commissioner of Health or otherwise than in accordance with the terms of said permit and the regulations of said Board.

**Regulation 1. Application for Permit.**

An application for a permit to engage in the business of cleansing or descaling water coils, and cleansing, descaling or painting water tanks, which are part of a building water supply system used for domestic consumption, shall be made to the Commissioner of Health on forms furnished for such purpose by the Department of Health, and shall include a description of the method of treatment, specifying chemicals or other substances to be used in the process.

**Regulation 2. Treatment to be Approved.**

No permit shall be issued unless the treatment method certified to in the application for permit has been approved by the Department of Health.

**Regulation 3. Responsibility of Permittee.**

The permittee shall at all times be strictly responsible for conformity with the treatment method certified to in his application.

**Regulation 4. Application of Treatment.**

No water coil shall be treated for the purpose of cleansing or descaling by the permittee until it has been completely separated from the building water supply system which the unit serves. Water tanks shall be treated as required in Section 61A.

**Regulation 5. Reconnection to Supply System.**

A water coil or water tank which has been treated by the permittee for the purpose of cleansing, descaling or painting shall not be reconnected to the system that it serves until any foreign chemical or substance used in the process has been neutralized, and the coil or tank has been thoroughly cleansed by flushing with water. Flushing and cleansing with city water must be effected through an indirect connection in such manner that contamination of building water supply cannot occur.

**Regulation 6. Record of Treatment.**

The permittee shall keep on file a record of the date, street address and work performed at each location for a period of one year after the completion of the work. Such records shall be open to inspection by a representative of the Department of Health.

**Regulation 7. Revocation of Permit.**

The Commissioner of Health may suspend a permit issued hereunder for cause and may, after a hearing, revoke the permit if he finds that protection of the health and safety of water consumers require such action.

## THE RULES AND REGULATIONS FIXING UNIFORM ANNUAL CHARGES AND EXTRA AND MISCELLANEOUS CHARGES FOR THE SUPPLY OF WATER, AS ADOPTED BY THE BOARD OF ESTIMATE ON JANUARY 1st, 1938, AND AS AMENDED TO AND INCLUDING JULY 2nd, 1947 IN CONFORMITY WITH SUB-DIVISION 4, SECTION 734, CHAPTER 30 OF THE NEW YORK CITY CHARTER AND SECTION 415 (1)-18.0 OF THE ADMINISTRATIVE CODE OF THE CITY OF NEW YORK, PROVIDE AS FOLLOWS:

Section 1 (A).

1. **Definitions:** As used in these rules:

    1. The term "family" means either a person occupying a dwelling and maintaining a household, with not more than two (2) rooms available for boarders, roomers or lodgers, or two or more persons occupying a dwelling and maintaining a common household, with not more than two (2) rooms available for boarders, roomers or lodgers.

    2. A boarder, roomer or lodger residing with a family means a person living within the household who pays a valuable consideration for such residence and who does not occupy such space within the household as an incident of employment therein.

    3. The term "apartment" means that portion of a building consisting of one or more rooms and occupied by one or more persons as a dwelling unit separate and set apart from other rooms or groups of rooms within a building. This classification shall include and apply to maisonette apartments, apartment houses, apartment hotels, bachelor apartments, studio apartments, duplex apartments, kitchenette apartments and dormitories. This classification shall not include any occupancy heretofore required to be metered.

    4. The term "room" means that portion of an apartment or dwelling so constructed that it may be used for separate occupancy by one or more persons.

Section 1 (B)—**Frontage Rents.**

The annual frontage rents on premises wholly or partly unmetered shall be as follows:

| Front Width of Building | One-Story | Front Width of Building | One-Story |
|---|---|---|---|
| 16 feet and under | $ 6.00 | Over 22½ feet to 25 feet | $12.00 |
| Over 16 feet to 18 feet | 7.50 | Over 25 feet to 30 feet | 15.00 |
| Over 18 feet to 20 feet | 9.00 | Over 30 feet to 37½ feet | 18.00 |
| Over 20 feet to 22½ feet | 10.50 | Over 37½ feet to 50 feet | 21.00 |

For each additional story $1.50 per annum shall be added; and for each additional ten (10) feet or part thereof above fifty (50) feet in front width of building, $3 shall be added.

All rear buildings on any lot or lots, with front buildings thereon, shall pay an annual frontage rate of $7.50 for each twenty-five (25) feet front, or fraction thereof, but this provision shall not apply to buildings erected on corner lots, each of which building shall pay the regular rates as stated in the foregoing subdivision.

The apportionment of the regular frontage rates upon buildings shall be on the basis that but one family is to occupy same, and for each additional family or apartment, $1.50 per year shall be charged.

Section 1 (C).

Each room in a building or apartment available for occupancy by boarders, roomers or lodgers, in excess of the two (2) rooms permitted a family, as herein defined, shall be subject to an annual charge of One Dollar ($1.00) per person in addition to the family or apartment charge as established under these rules and regulations. In buildings or apartments occupied entirely by boarders, roomers or lodgers, the family or apartment charge shall not apply.

Section 2. **Extra and Miscellaneous Rates Where Supply Is Not metered.**

1. Baths in excess of one (1) to each house, $4.50 each per annum.

1a. Tub, which has the shape or design of a bathtub, located in a kitchen of an apartment,** $2.00 each per annum.** This charge shall not apply where any other room containing a bath is located in any such apartment.

2. Shower baths, not installed over bathtubs, and "sitz" baths, shall be charged same as baths.

3. Baths, in barber shops, public houses and bathing establishments, shall be charged $7.50 each per annum.

4. Baths, outside shower, $7.50 per annum. An outside shower bath is one comprising a section of piping with or without spray attachment, located in any place outside of the building.

5. Water closets and urinals of every description in excess of one to each house, $3 each per annum.

6. Ash lifts. Not in excess of thirty-can lift per day a charge of $4.50 per annum. For each additional thirty-can lift or fraction thereof, an additional charge of $3 per annum.

7. Backfilling. For each cubic yard, determined on the cubical contents of excavation to be filled with earth, three (.03) cents.

8. Bakeries. Each oven, $7.50 per annum.

9. Barber shops. Each up to and including three (3) chairs, $7.50 per annum; for each additional chair $1.50 per annum.

10. Beauty, hairdressing and manicuring parlors. When equipped with not more than three (3) chairs or three (3) tables to be used

by patrons receiving treatment or treatments, the charge for water shall be $7.50 per annum. For each additional chair or additional table so used, an additional charge of $1.50 per annum.

11. Boats. Barges (without steam). Each $7.50 per annum, water for domestic use only.

12. Water boats (motor) shall be charged monthly, from $11.25 to $37.50 according to tank capacity of each boat, as follows:

| | |
|---|---|
| 3,000 gallons or less | $11.25 |
| Over 3,000 gallons, but not exceeding 6,000 gallons | 22.50 |
| Over 6,000 gallons, but not exceeding 12,000 gallons | 37.50 |
| Over 12,000 gallons, the rate for steam water boats shall be charged. | |

13. Water boats (steam). Monthly charges shall be from $37.50 to $150.00 according to tank capacity of each boat, as follows:

| | |
|---|---|
| 12,000 gallons or less | $ 37.50 |
| 12,000 to 20,000 gallons | 56.25 |
| 20,000 to 30,000 gallons | 75.00 |
| 30,000 to 40,000 gallons | 93.75 |
| 40,000 to 60,000 gallons | 112.50 |
| 60,000 to 100,000 gallons | 150.00 |

14. Boilers of boats or portable. The monthly rate for water supply for hoisting, steam rolling, steam shovelling, dredging, erecting, hauling, pile driving, derricks, diggers, conveyors and all floating or portable steam plants and steamboats, except water boats supplying shipping, shall be from $1.50 to $15.00 according to the amount of horsepower used, as follows:

| | |
|---|---|
| Up to and including 10 horsepower | $ 1.50 |
| Up to and including 15 horsepower | 2.25 |
| Up to and including 20 horsepower | 3.00 |
| Up to and including 25 horsepower | 3.75 |
| Up to and including 30 horsepower | 4.50 |
| Up to and including 35 horsepower | 5.25 |
| Up to and including 40 horsepower | 6.00 |
| Up to and including 45 horsepower | 6.75 |
| Up to and including 50 horsepower | 7.50 |
| Up to and including 55 horsepower | 8.25 |
| Up to and including 60 horsepower | 9.00 |
| Up to and including 65 horsepower | 9.75 |
| Up to and including 70 horsepower | 10.50 |
| Up to and including 75 horsepower | 11.25 |
| Up to and including 80 horsepower | 12.00 |
| Up to and including 85 horsepower | 12.75 |
| Up to and including 90 horsepower | 13.50 |
| Up to and including 95 horsepower | 14.25 |
| Up to and including 100 horsepower | 15.00 |

Above 100 horsepower, at the rate of fifteen (15) cents per horsepower per month, using the multiple of five (5) as in above table. An allowance of 33-1/3 per cent in the above rates shall be made where condensers are used.

15. Boilers, permanent. The annual rate for water supplies in houses for boilers, except those used exclusively for heating purposes, shall be $3.24 per boiler horsepower installed.

16. Boiler testing. All boats, in addition to paying the regular fixed charges, shall pay an extra charge of $150 per annum when engaged or employed in furnishing water in the testing of boilers in the other boats.

17. Bottling establishments. Each bottle-washing apparatus, machine or tub, $15 per annum.

18. Building Purposes. Stone work, terra cotta, concrete, fireproofing, brick work, and all other forms of masonry, seven and one-half (.07½) cents per cubic yard; plastering, sixty (.60) cents per hundred (100) square yards, openings not included.

19. Cafe, restaurant, liquor and lager beer saloons or any store similarly used. Maintaining equipment commonly known as a bar, a fixture known as a washbox, equipment known as a beer pump or similar apparatus for any other beverage, shall be charged as follows:

For each washbox .....$ 7.50 per annum
For each bar ..... 15.00 per annum
For each pump where the use of water is required for its operation ..... 75.00 per annum

20. For cafe, dining saloons, luncheonette, lunch counter, restaurant, or other place where food is served for consumption on the premises, $12 per annum.

21. Caisson sinking and air compressors. Fifteen (.15) cents per hundred (100) cubic feet.

22. Camps. When not furnished with water through an independent service pipe, $4.50 per season.

23. Compressors (portable). For water used by compressors or any gasoline-operated apparatus with a return cooling circulating system, $1.50 per month.

24. Condensers. Fifteen (.15) cents per hundred (100) cubic feet.

25. Demolition. For wetting down while buildings are being demolished, a charge shall be made equal to three-eights (3/8) of the annual frontage rate of said building.

26. Dentist. Each fountain cuspidor, $1.50 per annum.

27. Fire line or sprinkler system, in buildings used for domestic purposes. The annual rate shall be from $1.50 to $12.00, according to the size of the tap or connection, as follows:

For each 1½-inch tap, or smaller, or connections of similar sizes within buildings .....$ 1.50
For each 2-inch tap, or connections of similar sizes within buildings ..... 3.00
For each 3-inch tap, or connections of similar sizes within buildings ..... 4.50
For each 4-inch tap, or connections of similar sizes within buildings ..... 6.00
For each 5-inch tap, or connections of similar sizes within buildings ..... 7.50
For each 6-inch tap, or connections of similar sizes within buildings ..... 9.00
For each 8-inch tap, or connections of similar sizes within buildings ..... 12.00

28. Fish stands. Each, $15 per annum. If live fish are sold, other than shell fish, $37.50 per annum.

29. Florists and conservatories. Each, $7.50 per annum.

30. Fountains, ornamental or display. For water served through piping physically connected to such fountains, where the pipe is not in excess of one-half (½) inch in diameter, the charge for the period of use within any calendar year shall be $7.50.

31. Garage, inside, capacity not more than three cars, $1.50 per annum. An inside garage shall be construed as meaning any room or space suitable for legal use as a garage, located in a building which is physically connected with the water supply by means of a pipe extending from the City water main. Water supply to separate or inside garage with capacity of more than three cars, shall be metered.

32. Gas refrigeration. The annual charge for water available for use or used for the purpose of cooling gas or gases to produce refrigeration shall be as follows:

**Domestic Use**

Not in excess of 75 lbs. daily refrigeration ....$3.75
Not in excess of 100 lbs. daily refrigeration.... 5.25

**Business Use**

Single units not in excess of 100 lbs. daily refrigeration .....$7.50
Double units not in excess of 200 lbs. daily refrigeration .....15.00

33. Horse troughs. For each trough and for each one-half barrel or tub on sidewalk or street, $30 per annum.

34. Hose bib.

(a) For a hose bib, faucet, or other plumbing fixture attached to the outside of a building or located at any point on a lot, $7.50 per season from April 1 to October 31, both inclusive. This authorizes the use of water for all purposes specified in subdivisions (b), (c) and (d). Where there are two or more outside hose bibs or attachments and the water therefrom is used for the same general purpose, charge will be made for only one hose bib.

(b) For use of water through hose, pipe or other fixture attached to the inside of a building, for garden and lawn, or lawn, shrubbery, flowers, for washing street, sidewalk, areaway and steps of building, $7.50 per season from April 1 to October 31, both inclusive. Permit therefor must be obtained.

(c) For use of water through hose, pipe or other fixture for washing street, sidewalk, areaway and steps of building exclusively, $7.50 per season from April 1 to October 31, both inclusive. Permit therefor must be obtained.

(d) Victory Gardens—for the duration of the war. For use of water through hose, pipe or other fixture, other than an outside hose bib, for irrigating non-commercial victory vegetable gardens exclusively, $0.50 for each 500 square feet or fraction thereof per season from May 1 to September 30, both inclusive. Permit therefor must be obtained.

35. Ice Machines. For any machine or apparatus used in the production of ice or refrigeration (or any air conditioning machine or apparatus), a yearly charge of $30 per ton shall be made for the actual capacity of the machine or apparatus. The yearly charge for an ice machine or similar apparatus equipped with an approved water-conserving device shall be $4.50 per ton for the actual capacity of the machine or apparatus.

Air conditioning units requiring a minimum rate of flow of water in excess of one-half (½) gallon per minute shall be metered.

Air conditioning equipment with a refrigeration unit which has a definite rate of capacity in tons or fraction thereof, the charge will be at the rate of $30 per annum per ton capacity from the date installed to the date when the supply is metered. Such units, when equipped with an approved water-conserving device, shall be charged at the rate of $4.50 per anum per ton capacity from the date installed to the date when the supply is metered.

Air conditioning apparatus not equipped with a refrigerating unit or using water for other than refrigerating uses, for the cleaning or conditioning of air, the following rates are established for the period between the time the unit is installed and the date when the supply is metered:

Air conditioning units requiring less than one-half (½) gallon of water per minute, $6 per annum.

Air conditioning units requiring one-half (½) gallon and up to, but not including, one (1) gallon per minute, $7.50 per annum.

Air conditioning units requiring one (1) gallon and up to, but not including, one and one-half (1½) gallons per minute, $15 per annum.

Air conditioning units requiring one and one-half (1½) gallons and up to, but not including, two (2) gallons per minute, $22.50 per annum.

Air conditioning units requiring two (2) gallons and up to, but not including, three (3) gallons per minute, $30. per annum.

Air conditioning units requiring three (3) gallons or more per minute, $15. per gallon or fraction thereof, per annum.

36. Laundries. Each wash tub, washing machine or apparatus for washing clothes, $7.50 per annum.

37. Milk depots. For the purpose of washing cans or bottles, each washing machine, tub or washing apparatus, $15 per annum.

38. Photograph galleries. Each faucet or outlet, $7.50 per annum.

39. Pulsometers. For the use of water not in excess of nine (9) hours daily, seventy-five (75) cents per day. For each hour or fraction thereof in excess of nine (9) hours daily, seven and one-half (7½) cents.

40. Railroad track repairs. For each repair gang or group engaged in repair work, $7.50 a month.

41. Rock drilling machines. For water used for their operation or cooling of drill heads, flushing or jetting drill holes, fifteen (15) cents per each one hundred (100) cubic feet of water furnished.

42. Sand and steam blasting machines. For water used through the operation of blast machines or other apparatus similarly employed to eject liquid or material for the washing or cleaning of walls of buildings, fifteen (15) cents per one hundred (100) cubic feet.

43. Siphons. Automatic or other permanent apparatus in buildings used for domestic purposes, requiring the use of water for operation, shall be charged as follows:

| | | | |
|---|---|---|---|
| ½-inch | water supply connection... | $36.00 | per annum |
| ¾-inch | water supply connection... | 54.00 | per annum |
| 1 -inch | water supply connection... | 72.00 | per annum |
| 1¼-inch | water supply connection... | 90.00 | per annum |
| 1½-inch | water supply connection... | 108.00 | per annum |

Where used during construction of building, the charge shall be as follows:

| | | | |
|---|---|---|---|
| ½-inch | water supply connection... | $18.00 | per month |
| ¾-inch | water supply connection... | 27.00 | per month |
| 1 -inch | water supply connection... | 36.00 | per month |
| 1¼-inch | water supply connection... | 45.00 | per month |
| 1½-inch | water supply connection... | 54.00 | per month |

44. Soda or mineral water fountains. Each $7.50 per annum. One washbox or glass-washing spray allowed. For each additional washbox or glass-washing spray, $4.50 per annum.

45. Soda, mineral or carbonic water manufacturers. For each machine or apparatus (retail) $15 per annum; for each machine or apparatus (wholesale), $150 per annum.

46. Stalls. In stables, $1.50 each per annum.

47. Steam pressers. For each boiler serving steam to a presser in a tailoring or other establishment where garments are pressed, $3. per annum.

48. Stores. Where a store or other independent portion of a building is used for business purposes and hot and cold water is available, $7.50 per annum. Where cold water or hot water only is available, $4.50 per annum. These charges shall apply to each loft floor of a building.

49. Swimming pools, swimming tanks, plunge baths and wading pools. Where located within buildings, $1.50 per annum for each ten (10) cubic feet of the cubical contents thereof. Where swimming pools, swimming tanks, plunge baths and wading pools are conducted as a business enterprise and admission charged, the supply is to be metered.

50. Test boring. For each machine used in test boring, $7.50 per month.

51. Testing, Standpipes or other fire lines. For unmetered water used in the testing of standpipes or other fire lines within buildings, $1.50 for each test.

52. Wash drills. Fifteen (15) cents per one hundred (100) cubic feet.

53. Water motor. Where the capacity of motor is not in excess of one one-hundredth (1/100th) horsepower, $3 per annum.

54. Farms (Commercial). For the duration of the war and six months thereafter, unmetered water may be served to commercial farms from city hydrants at the rate of $18.00 per acre or part thereof per farming season year, which shall be from May 1st to October 31st. Upon payment of such rate the Commissioner may issue a permit authorizing the use of designated fire hydrants. Each permittee shall be held liable for any damage to a fire hydrant caused by his use. Only standard fire hydrant wrenches approved by this department shall be used in the operation of these hydrants. Connections to hydrants shall also be approved by the department prior to use and shall be such that they can be readily detached in the event that immediate use of the hydrant for fire or other purposes becomes necessary. No waste or leakage shall be permitted. Any such permit may be revoked for the violation of these rules.

55. Charge for unmetered water used in the operation of any machine or apparatus not heretofore provided shall be on the basis of fifteen (15) cents per hundred cubic feet of water consumed.

Section 3. **Meter Rates.**

The charge for water measured by meter shall be fifteen (15) cents per one hundred (100) cubic feet.

Section 4. **Supply Discontinued on Non-Payment.**

The supply of water may be cut off in all cases where the rent therefor is behind and unpaid ten (10) days.

Where, by any cause or reason, a water meter shall fail to register correctly, or shall, by any defect, cease to record the quantity of water passing through it, or where a meter shall have been removed from the service supplying the premises for repairs, or for other reason, then the Commissioner may disregard such incorrect registry or such non-registry and may charge for water supplied during the period of incorrect registry, non-registry and during the period when such meter shall have been removed from the service for repairs, or for any other reason, at the daily registration of water indicated by meter for an appropriate period prior or subsequent to such period at the rate of fifteen cents per hundred cubic feet.

Section 5. **Permit Conditions.**

Each permit issued under these rules shall be conditioned upon acceptance by the permittee of all the terms and conditions of such rules and all other applicable rules of the department and the permittee shall hold the City of New York harmless against any loss,

expense (including expense of litigation) or damages (including liability to third persons because of death, bodily injury or property injury, or destruction, or otherwise) of any kind whatsoever, arising out of, or in connection with, the use for which said permit was issued, and the permittee's application for and acceptance of a permit under these rules shall be deemed to be an acceptance of the terms and conditions set forth in such rules and an agreement by such permittee to be bound thereby.

# RULES AND REGULATIONS GOVERNING AND RESTRICTING USE AND SUPPLY OF WATER IN NEW YORK CITY

## GENERAL RULES

**Connection to Independent Water Supply Prohibited.**

100. In any system of piping supplied by City water, no connection to any other source of water supply shall be made or maintained.

**Direct Connections to Drainage System Prohibited.**

101. Direct connection between water supply piping and any drainage system or vent piping is prohibited. (See Administrative Code Sec. C26-1223.0).

**Chemical Water Treatment.**

102. Chemical treatment of water used for human consumption is prohibited except by a licensed operator qualified by the Department of Health under the provisions of Section 170 of the Sanitary Code, and such treatment is to be limited to the chemicals and mixtures thereof as specified by that section..

Chemical treatment apparatus approved by the Board of Standards and Appeals under provisions of Section 170 of the Sanitary Code must be submitted to the Department of Water Supply, Gas and Electricity for approval of methods of connections to water supply systems. Such apparatus shall also be subjected to siphonic tests to determine what check valves and vacuum breakers may be required in the installation to prevent contamination of the water supply by siphonage of chemicals. (In excess of the dilutions prescribed by Section 170 of the Sanitary Code), into the water supply system.

Water supply connections to boilers, commercial equipment, or other commercial apparatus requiring any form of chemical water treatment shall be adequately protected against backflow or siphonage of contaminated water into the water supply system, with check valves or vacuum breakers, or both, as required by the Department of Water Supply, Gas and Electricity. Plans for such installations must be approved by the Department.

**Contamination of Water Supply.**

103. Where there is danger of contamination of the water supply, or where such contamination actually develops, the fixtures, apparatus or piping shown to be responsible for the condition shall be altered or replaced to conform to the requirements of the current provisions of the Building Code of the City of New York.

**Priming Connections Pumps.**

104. No pump shall be equipped with a direct water supply connection for priming purposes except with the written permission of the Department of Water Supply, Gas and Electricity. Water for priming purposes may be supplied by means of an indirect water supply connection through an open tank with the outlet of the direct water supply located at least 2 inches above the maximum overflow level of such tank.

**Ship Connections.**

105. Every water connection on a pier, wharf or bulkhead, used or available as a ship or boat supply, including fire connections, shall be equipped with an approved horizontal swing check valve immediately adjacent

to the outlet of the control valve of the permanent water connection. The outlet of the check valve shall be equipped with a hose or union coupling to permit ready detachment for inspection and testing purposes.

**Auxiliary Supply for Tank.** 106. Where the city water is used as an auxiliary supply to a roof or suction tank, which is also fed by a well, by salt water or by other source of supply, the tank shall be an open one and the pipe supplying City water thereto shall be controlled by a ball valve and shall discharge at least 2 inches above the overflow pipe of the tank.

**Penalty for Violation.** 107. The penalty for violation of any one of Rules 100, 101, 102, 103, 104, 105 and 106 will be the shutting off of the water supply to the premises and charging to the owner all expense incidental thereto and service will not be restored until violations have been removed.

**Ownership of Taps, Services, Meters and Appurtenances.** 108. Installation and maintenance of taps (corportation stops), wet connection sleeves and valves service pipes, curb stops, meters and appurtenances shall be entirely at the expense of the owner.

**Access by Employees.** 109. Officers, agents and employees of this department shall, in their official capacity, have free access at proper and reasonable hours to all parts of every building, boat or place in which meters are located and where City water is or may be furnished or used.

**Shutting Off Supply.** 110. A department employee or agent, when authorized, may shut off the water supply for the purpose of inspection or to make repairs or alterations to water mains, meters, pipes, valves or other appurtenances. No other person shall open, close or tamper with any valve, valve box or valve box cover, or any other equipment in a city main.

**Shut-Off Charges.** 111. When it is necessary for the department to shut off a tap because of a leaking service, nonpayment of a bill, or non-compliance with the Department regulations, the owner will be charged with all costs incidental thereto.

112. When the tap of a leaking service pipe is shut by Department force, the owner will be afforded reasonable time in which to engage a licensed plumber to take over the street excavation and make the necessary repairs. If the owner fails to engage a licensed plumber, the tap will be left closed, the house control valve will be shut and the excavation backfilled immediately; after which a ten-day notice to repair the service will be served on the owner or occupant.

113. When tests made by the department indicate a leak at a tap on a service pipe and where conditions permit, a three-day notice to repair will be served upon the owner or occupant. If the notice is not complied with, the department will shut the tap and charge the expense incurred to the owner. In no instance will the department make any repairs to a service pipe.

114. If a tap has been shut off by the department or the owner's plumber and the service connected therewith is not to be used, the owner's plumber shall, having secured the necessary permit, plug the tap and remove a portion of the abandoned service pipe at the point of entry into the building. Any meter covering the abandoned service pipe shall be physically removed and any curb box over the abandoned service shall be removed.

**Use of Hydrants.**

115. Hydrants are to be used only by authorized employees of this department or of the Fire Department, or by persons holding a permit from this department. In operating a hydrant, a wrench of a design approved by the department shall be used; the use of any other type of wrench or operating device will not be permitted. The use of the large nozzle is restricted to Fire Department only. No high pressure hydrant or specially designated hydrant shall be opened or used except by the Fire Department. Nozzle caps shall be replaced after use of hydrant. The use of a defective hydrant is prohibited. Access to hydrants shall not be obstructed. Connections with hydrants shall be made by valves or couplings which can be quickly and easily detached. Hydrants shall be protected by the user from freezing or other damage and if damage to a hydrant results from the use thereof, repairs shall be made at the expense of the user. To prevent freezing, hydrants used at any time during the period from November 1st to April 1st shall in every instance be pumped out immediately after use. No hydrant shall be used when the temperature is less than 32 degrees Fahrenheit, except in emergency and under special permission from this department.

**Supervision Cost Assumed By Permittee.**

116. When the use of a hydrant is authorized for construction or other purposes, the permittee shall assume the obligation for payment of wages of the inspector designated by the Commissioner to supervise its use during the period covered by the permit. The permittee shall also be obliged to provide Workmen's Compensation Insurance in a form satisfactory to the department.

**Prevention of Waste.**

117. All owners, occupants or lessees obtaining water from the City system will be obliged to prevent leakage or waste of such water under penalty of fine prescribed under the provisions of the Administrative Code, Section 734 (4)-4.0.

## PERMITS

**General Permits.**

118. Subject to the provisions of these regulations, permits for the following purposes will be issued upon the receipt of proper applications and satisfactory proof that the applicant has complied with all provisions of the Workmen's Compensation Law:

Air Conditioning Apparatus, Installation of
Building Purposes, Regular
Building Purposes, Power Boilers
Building Purposes, Extra, Miscellaneous
Demolition
Electrical Tap Indicator, Use of
Hydrant, Use of

Hydrant, Flow or Pressure Test
Hose Bib, Outside
Hose, Use of Unmetered
Hose, Use of Metered
Meter, Disconnect for Repair or Change of Piping
Meter, Setting, New or Additional
Refrigeration
Service Pipe Repair
Shipping, Steam Purposes
Shipping, Water Boats
Shipping, Extras
Thawing Service Pipes
Taps and Plugs
Water Fixtures, Installation or Removal

Work under permits shall be performed by the permittee or persons directly employed by the permittee.

**Application.** 119. Application for water supply shall state the purpose for which same is required, together with name and address of owner of property. Information furnished shall be in affidavit form if required. No water shall be served except to the building for which application was duly made and permit authorized.

120. No additional plumbing fixtures or water-using apparatus are to be installed nor are plumbing fixtures to be removed from any building where the supply of water is not fully metered until application has been made to this department.

**Unmetered Water.** 121. No unmetered city water shall be used in any premises where the supply is recorded as fully metered or in that part of any premises that is recorded as being supplied through a meter or meters.

**Permits; to Whom Issued.** 122. Permits involving plumbing work will be issued only to licensed and bonded plumbers who are duly registered in the office of the Department of Housing and Buildings in the borough in which the work is to be performed and to plumbers in the employ of Municipal, State or Federal Governments. Meter repair permits will be issued to authorized meter repair companies for the repair on the premises of cold water meters 3-inch in size and larger.

A licensed plumber may open or shut off a tap controlling a service pipe for the repair, replacement or installation for which a permit has been issued. In the event that in making a repair, replacement or installation of a service pipe it is necessary to shut off a water main, such shut off shall be made only by the department.

**Approval by Bureau of Highways** 123. All permits issued by this department for work which requires the opening of a highway will be issued, subject to approval by the Bureau of Highways.

**Building Construction.** 124. All water used in the construction of buildings of seven or more stories in height shall be metered. Prior to the commencement of actual building operations, meter of proper size shall be installed on each tap or service supplying the premises. It shall be placed in an ac-

cessible location at a point to be designated by the department, close to the point of entry of the service pipe and shall be enclosed in a vault or box of ample size and substantial construction which will provide adequate protection against damage or injury from frost or any other cause. Each meter shall remain in service throughout the entire period of building operation, and subsequently until such time as the annual water charges for the structure become effective or the permanent meter has been installed. In the event that the meter has not covered the water service to the premises or has not been maintained in good working order, during the entire period of building operations, the charge for water consumed during such building operations shall be established as provided by the rules and regulations fixing charges.

No permit will be issued for the installation of a meter to register the supply of water used for the construction of a building six stories in height or less. Such water will be charged for as provided in rules and regulations.

**Building Purpose Charges to Be Prepaid.**

125. A permit for a tap or service pipe for unmetered water that is to be used in the erection of a new, or the alternation of an existing building, will be issued only on prepayment of all charges for water to be used.

**Demolition.**

126. Where plans have been filed in the Department of Housing and Buildings for a new structure, the water for which can be supplied through an existing tap, such tap may remain upon owner's application, provided that both tap and service pipe conform with existing regulations as to size and materials. (See Section 734 (1)-7.0 of the Administrative Code).

**Return of Permits.**

127. Within twenty-four hours following the completion of any work for which a meter permit has been issued, the permit, carrying a certification of the date of completion of the work, shall be returned to the office of the Bureau of Water Register.

**Permits at Job Location.**

128. All permits for the use of water on construction work shall be kept in an accessible location on the premises or job.

## TAPS

**Separate Supply.**

129. Except with the written permission of the department, a separate tap and service shall be installed for each building located on a street in which there is a City water main and no consumer will be allowed to supply water to other persons or premises. The siamesing of taps or services on the inlet side of the main control valve is prohibited. A service line connected to the City main by a three-way or by any means other than a tap or wet connection shall be controlled by a valve placed in the service line within two feet of the point of connection to the main.

**Connections to City Mains.**

130. Taps, wet connections or other connections to a City main shall be made only by department employees. For mains 4 inches and less in diameter, direct tap connections shall not exceed 1 inch in diameter; larger

tap connections up to 2 inches in diameter shall be made through a tapping saddle which is to be provided and set by the plumber, as directed by the department; a connection the same size as the main may be made by a three-way and a 2 or 3-inch connection may be made by a wet connection on a 4-inch main.

For 6-inch mains, direct tap connections shall not exceed 1½ inches in diameter; 2-inch and larger connections to this size main shall be wet connections. For mains larger than 6 inches in diameter, direct tap connections shall not exceed 2 inches in diameter; all other connections shall be wet connections.

Tapping saddles shall be provided by the plumber whenever the wall thickness of a pipe to be tapped is not sufficient to securely hold the tap.

**Spacing of Taps and Wet Connections.**

131. No tap or wet connection shall be inserted within 24 inches of a hub, other connection, special casting, hydrant branch or dead end. The minimum spacing interval for taps and wet connections shall be 18 inches for ⅝, ¾ and 1-inch taps and 24 inches for 1½ and 2-inch taps and wet connections. No tap or wet connection shall be installed below the horizontal plane of the City main.

**Charges for Taps, Plugs and Connections.**

132. The charges for a tap, a plug or a wet connection will be for the furnishing, delivering and inserting of the plug or tap, or the furnishing and setting of the wet connection sleeve and valve complete and ready for connection of the service pipe. These charges will be fixed by the Commissioner and will be subject, without notice, to such occasional revisions as may be required by changes in the costs of labor and material.

**Destruction of Abandoned Taps and Wet Connections.**

133. All driven taps when abandoned shall be removed and replaced by plugs and all wet connections and screw taps when abandoned shall be destroyed in place, the expense in connection therewith being chargeable against the owner of the property into which enters the service pipe leading from the abandoned tap or connection. Where a tap or wet connection is destroyed by a plumber under authority of a permit and the connecting service pipe is one equipped with a curb valve and box, the curb box must be removed.

**Plugs.**

134. The charge of $1 will cover all work and expense incurred by the department in the replacement of a tap by a plug or for the destruction of an abandoned tap.

If an excavation made under a permit covering the removal or destruction of a single tap reveals that the service pipe is supplied by two or more taps, the plumber making the excavation will be held responsible for the plugging or destruction of the additional taps.

The department does not guarantee to furnish the location of any tap to be plugged or destroyed, the responsibility for locating the tap resting solely with the licensed plumber obtaining the permit.

**Method of Destroying Wet Connections and Taps.**

135. All labor and material necessary to destroy a wet connection shall be furnished by the owner's plumber. The valve shall be closed, stuffing box gland thoroughly tightened and valve stem cut off flush with stuffing box gland, and service pipe disconnected and plug inserted in outlet end of the valve. Where conditions require it, the plug and valve shall be anchored to the main as directed by the department. If the valve cannot be operated, the City main shut off required will be made by the Department without cost. A tap shall be destroyed by removing a diagonal portion of the tap thread.

**Method of Abandoning Three-way Connection.**

136. Three-way connections to be abandoned shall have all piping disconnected and removed from the branch hub of three-way and a plug caulked into such hub, the plug then being properly anchored to the main as directed by the department. All work shall be done by a licensed plumber. The shut-off required will be made by the department without cost.

**Use of Electrical Indicator.**

137. Upon application, the department will endeavor to locate a tap or service pipe by use of electrical indicator, on payment of $7.50 in advance. If pipe or tap is not found within three feet of the location as determined by the indicator, department will make a second survey without additional charge. Upon failure of the department's indicator to locate the tap after two attempts, the department will assume responsibility to locate and plug the tap. No refund or credit will be allowed if indicator fails to locate the tap or service. Receipt for use of the indicator shall be on the job at time appointed for the test.

**Size and Number of Taps.**

138. The size and number of taps or connections for a supply to a building shall be based upon the total floor area of the building, viz., the area which the building occupies multiplied by the total number of floors including those below the street level. The area of building shall be computed on the general or over-all dimensions, exclusive of small projections. Extensions shall be computed in the same way as the area of the building and their area shall be added to the floor space of the main building.

One ⅝-inch tap will be allowed up to 5,000 square feet area; one ¾-inch tap up to 8,000 square feet area; buildings in excess of 8,000 square feet floor area will be allowed the equivalent of one ¾-inch tap plus one ⅝-inch tap for each additional 5,000 square feet of floor area or fraction thereof.

**Size.**

139. Where premises are entitled to the equivalent of more than one ⅝-inch tap, and the estimated tap area so determined is between two standard tap areas, the standard tap to be granted is to be that with the area closest to the computed tap area.

**Additional Tap Area.**

140. On request, taps in number and size greater than those specified above may be allowed upon the plumber certifying on the application the number of flushometers, separate showers, roof tanks, pumps, fire lines or other apparatus which will increase the water demand beyond that

computed of the floor area basis. In such case, the department employee approving the application will note briefly the reasons for granting the increased tap area. In establishing the size of taps, special allowance will be made for low pressure areas and for service pipes exceeding 45 feet in length.

**Fire Connections.** 141. Sizes of connections for fire service shall be subject to the approval of this department. If the connection proposed exceeds 4 inches in diameter, plans of the fire installation shall accompany the request filed for approval. The diameter of the service pipe shall not exceed the diameter of the city main or that of the connection to the city main, except where the service pipe is to be the same size as the city main, the next smaller standard size wet connection shall be installed. The size of the fire connections installed under the Multiple Dwelling Law will be determined and approved by the Department of Housing and Buildings.

**Dual Fire and Commercial Service.** 142. A connection for commercial purposes may be made from a metered fire or sprinkler line of 4 inches or larger in diameter, provided a meter is installed on the commercial branch line. Such connection shall be taken from the inlet side of the fire meter control valve and the method of connection shall be subject to the approval of the department. On a 4-inch fire line, the connection shall not exceed 1½ inches in diameter. On a fire line 6 inches or larger in diameter, the size of the connection shall not exceed 2 inches. Fire lines shall not be cross-connected with any system of piping within the building.

**Fire Lines.** 143. Fire lines in buildings used for business purposes shall be metered. Fire lines in metered domestically occupied buildings, unmetered buildings or partially metered buildings may be installed on an annual rate basis, except that in partially metered premises, if the fire line is confined to the metered business section, the fire line shall also be metered.

**Fire Line Consumption.** 144. The use of water through meters approved for fire line only is prohibited for any other use. 1,000 cubic feet, per month, per inch diameter of meter may be used for testing fire lines.

**Refrigeration and Air Conditioning.** 145. No new installation of refrigeration or air conditioning equipment requiring the use of water shall be installed on any premises supplied from the municipal system until a permit authorizing such installation has been issued by the department.

Applications for permits shall specify the make, type and tonnage of installation, the minimum and maximum water requirements and such additional information regarding the proposed installation as may be required by the department.

Where the minimum rate of water required for the operation of the apparatus exceeds one-half gallon per minute, the supply shall be metered, subject to the discretion of the department.

Where the minimum rate does not exceed one-half gallon of water per minute, the supply shall be metered or charged for on an annual rate basis subject to the discretion of the department.

Air Conditioning.

146. No individual or collective air conditioning system installed on any premises for a single consumer shall be permitted to waste annually more than the equivalent of a continuous flow of five gallons of city water per minute.

All individual or collective air conditioning systems installed on any premises for a single consumer using city water annually in excess of the equivalent of five gallons per minute shall be equipped with a water conserving device such as economizer, evaporative condenser, water cooling tower or other similar apparatus, which device shall not consume for makeup purposes in excess of 15% of the consumption that would normally be used without such device.

Any individual or collective group of such units installed on any premises for a single consumer with a rated capacity of 25 tons or more, or water consumption of 50 gallons or more per minute, shall be equipped, where required by the the department, with a water meter to separately register the consumption of such unit or groups of units.

This rule shall also apply to all air conditioning equipment now in service.

147. Each direct water connection to a refrigerating unit using water for cooling purposes shall be equipped with a check valve, except in installations where the water supply piping has no contact with the refrigerant. This will be the case where two substantial and independent wall thicknesses of metal separate the refrigerant from the city water supply.

Refrigerating units with a capacity of more than twenty pounds of refrigerant shall be provided with a relief valve installed on the outlet side of the check valve of the water supply connection, such relief valve being set at five pounds above the maximum water pressure at the point of installation.

Use of Water Restricted.

148. The use of the pressure or flow of water from the city system as a source of energy is prohibited except when specifically approved by the department.

The use of water is permitted subject to such conditions or reservations as the department may consider reasonable.

The department reserves the right to restrict or prohibit extraordinary use of water if water supply conditions so require.

The City is not required to maintain any minimum pressure other than that required to deliver water into the basement of any premises.

Plumbers' Appointments.

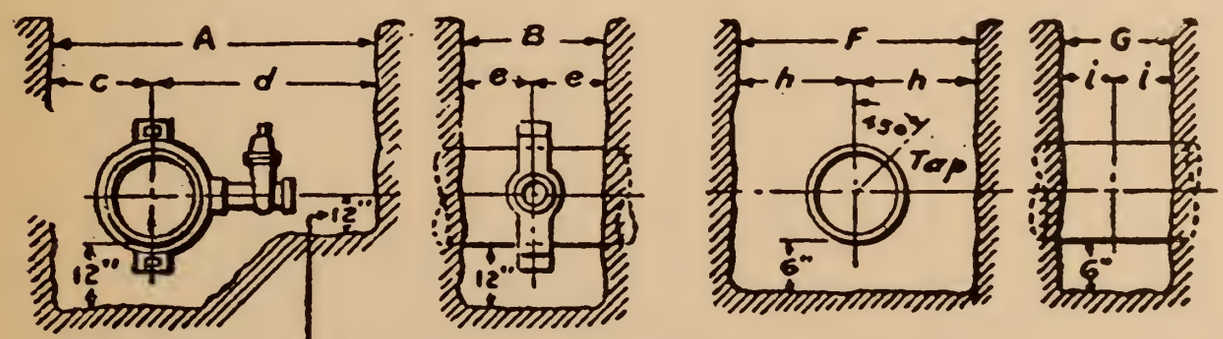
149. Advance notice shall be left at the Borough office of the Bureau of Water Supply by the plumber, fixing the date on which he wishes the tap, connection or plug inserted. The plumber shall also make an appointment with the Bureau of Water Supply to afford inspection, before backfilling is placed, on new or repaired service pipes. Advance notice of 24 hours or of such time as the department may determine will be required for this appointment. The department does not guarantee the insertion of a tap or placing of a wet connection

on the day for which the appointment may have been made with the plumber but will perform the work on the date or as soon thereafter as is found practicable.

**Delay in Tap or Service Inspection.** 150. The tapper or inspector will wait only a reasonable time to insert a tap or plug or pass upon the service installation. If a new appointment is necessary, it shall be made through the borough offices of the Bureau of Water Supply.

**Location of Taps.** 151. No tap will be inserted unless the location of the excavation agrees with that shown on the permit. All old taps shall be plugged or destroyed at or before the time of installation of a new tap or wet connection. If there is a city water main in the street, the tap shall be inserted in front of the building to be supplied with water and no tap shall be located in front of a driveway or proposed driveway, except when approved for one and two-family houses.

**Size of Excavation.** 152. Size of excavation for wet connection and tap shall be in accordance with the following table:




IF OBSTRUCTION PREVENTS USE OF RACHET ABOVE SHAFT, THEN MAKE NOT LESS THAN 3'-0" SO THAT RACHET CAN BE WORKED UNDERNEATH THE SHAFT.

| WET CONNECTIONS | | | | | | | TAPS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SIZE | | DIMENSIONS OF OPENINGS | | | | | SIZE | DIMENSIONS OF OPENINGS | | | |
| CONNECTION | WATER PIPE | A | B | c | d | e | WATER PIPE | F | G | h | i |
| 2" | 6" | 6'-10" | 4'-0" | 1'-0" | 5'-10" | 2'-0" | 4" | 4'-4" | 3'-0" | 2'-2" | 1'-6" |
| " | 8" | 7'-0" | " | 1'-1" | 5'-11" | " | 6" | 4'-6" | " | 2'-3" | " |
| 3" AND 4" | 6" | 8'-2" | " | 1'-0" | 7'-2" | " | 8" | 4'-8" | " | 2'-4" | " |
| " " " | 8" | 8'-4" | " | 1'-1" | 7'-3" | " | 12" | 5'-0" | " | 2'-6" | " |
| " " " | 12" | 8'-8" | " | 1'-3" | 7'-5" | " | 16" | 5'-4" | " | 2'-8" | " |
| " " " | 16" | 9'-1" | " | 1'-5" | 7'-8" | " | 20" | 5'-8" | " | 2'-10" | " |
| " " " | 20" | 9'-5" | " | 1'-7" | 7'-10" | " | 24" | 6'-0" | " | 3'-0" | " |
| 6" | 8" | 8'-7" | 5'-0" | 1'-1" | 7'-6" | 2'-6" | 30" | 6'-6" | " | 3'-8" | " |
| " | 12" | 9'-0" | " | 1'-3" | 7'-9" | " | 36" | 7'-0" | " | 3'-6" | " |
| " | 16" | 9'-4" | " | 1'-5" | 7'-11" | " | 48" | 8'-0" | " | 4'-0" | " |
| " | 20" | 9'-8" | " | 1'-7" | 8'-1" | " | | | | | |
| " | 24" | 10'-0" | " | 2'-6" | 8'-3" | " | | | | | |
| " | 30" | 10'-7" | " | 2'-9" | 8'-7" | " | | | | | |
| " | 36" | 11'-1" | " | 3'-0" | 8'-10" | " | | | | | |
| " | 48" | 12'-1" | " | 3'-6" | 9'-4" | " | | | | | |
| 8" | 12" | 9'-2" | " | 1'-3" | 7'-11" | " | | | | | |
| " | 16" | 9'-6" | " | 1'-5" | 8'-1" | " | | | | | |
| " | 20" | 9'-10" | " | 1'-7" | 8'-3" | " | | | | | |
| " | 24" | 10'-2" | " | 2'-6" | 8'-5" | " | | | | | |
| " | 30" | 10'-8" | " | 2'-9" | 8'-8" | " | | | | | |
| " | 36" | 11'-3" | " | 3'-0" | 9'-0" | " | | | | | |
| " | 48" | 12'-3" | " | 3'-6" | 9'-6" | " | | | | | |

WHERE TWO TAPS ARE PLACED IN THE SAME OPENING MAKE G 4'-0" FOR TAPS UP TO AND INCLUDING 1" IN SIZE, AND 5'-0" FOR TAPS 2" IN SIZE.

If subsurface conditions make impracticable for a plumber to make an excavation of the dimensions indicated herein, the plumber shall notify the Borough Engineer or Chief Inspector, who will authorize an excavation of such dimensions as he shall determine. All excavations shall be made safe by sheathing and bracing, where necessary.

## SERVICES

**Service Pipes.** 153. A service pipe is defined as that portion of the water pipe extending from the public main to the main house control valve inside the building or to a point where the supply is fully metered.

**Materials.** 154. All materials used for installation or repair of service pipes shall be new and not used previously for any purpose. New service pipes of two inches in diameter or less may be of lead, lead alloy, cement lined standard wrought iron or steel, brass (with the exception mentioned below) or copper, at option of owner. Service pipes larger than two inches in diameter may be of brass, (with the exception mentioned below) extra heavy galvanized iron or galvanized steel, cement lined standard wrought iron or steel, or cast iron, at option of owner. The use of brass pipe, however, will not be approved if the water supply is furnished entirely from wells. Copper alloyed wrought iron or steel pipe may be used.

Except for the gooseneck, the material and diameter of a new service pipe shall be the same from the tap up to and into the building or to a point where service is fully metered. On lead services, however, where it is not practicable to set the meter close to the building or vault wall, extra heavy galvanized iron, cement lined standard wrought iron or steel, or brass pipe may be used, instead of lead pipe, between the inner face of the wall and the meter, provided that the lead service pipe is carried through the wall and a valve placed at this point, and provided further that the pipe extension between the valve and the meter is exposed to view.

For load service supplying sprinkler or standpipe systems, the section of the service extending inward from the outside face of the building wall shall be of approved material other than lead.

For standard wrought iron or steel pipe, lined with cement in conformity with these regulations, galvanizing will not be required but the minimum size shall be one size larger than that provided for in Rule 177 in all sizes up to and including two inches. Sizes larger than two inches in diameter shall be the same as pipe of other materials as provided in these regulations. All cement lined steel or wrought iron pipe shall conform to specification No. 32-p-10:36T of the Department of Purchase, with minimum thickness of cement lining and inside diameters as specified hereinafter. Cement lined pipe service installations of other than cast iron shall be fitted with lead lined malleable iron fittings as hereinafter specified.

Lead alloy pipe, up to two inches diameter, approved by the department may be used provided that it shall withstand internal cold water hydrostatic tests as required of AAA lead pipe under specifications 32-P-14:38T of the Department of Purchase, that all size shall have minimum bursting points equal to that of AAA lead

pipe with a ten per cent tolerance as determined by department tests and shall be sufficiently ductile to permit crushing a four inch section of three-quarter inch pipe to one-half of its outside diameter under a load of less than three thousand pounds without injury to the pipe. FOR ONE AND TWO-FAMILY DWELLINGS, LEAD ALLOY TUBING OF NOMINAL THREE-QUARTER INCH AND ONE INCH DIAMETERS APPROVED BY THE DEPARTMENT MAY BE USED PROVIDED THAT IT WITHSTAND AN INTERNAL COLD WATER HYDROSTATIC TEST OF ONE THOUSAND POUNDS PER SQUARE INCH WITH A TOLERANCE OF MINUS TEN PER CENT AND THAT ITS DUCTILITY BE PROPORTIONATE TO THAT REQUIRED OF LEAD ALLOY PIPE. Every one foot of lead alloy pipe and TUBING shall be marked with a trade name or manufacturer's marking that has been filed with this department and the nominal size shall be stamped at least once on each coil or length of pipe.

FITTINGS OR PIPE OF MATERIAL OTHER THAN SPECIFIED IN THESE REGULATIONS MUST BE INDIVIDUALLY APPROVED BY THE DEPARTMENT. THE MINIMUM SIZES OF SERVICE PIPE TO BUILDINGS EQUIPPED WITH FLUSH VALVE CONTROLLED FIXTURES SHALL BE ONE AND ONE-QUARTER INCHES DIAMETER.

**Dimensions and Weights.**

155. Dimensions and weights of pipe approved for use under these rules are as follows:

## AA LEAD PIPE

| Inside Calibre | Thickness in Inches | Wgt. per Linear Foot |
|---|---|---|
| ¾" | .23 | 3½ lbs. |
| 1 " | .246 | 4¾ " |
| 1¼" | .257 | 6 " |
| 1½" | .288 | 8 " |
| 2 " | .375 | 13¾ " |

## AAA LEAD PIPE

| Inside Calibre | Thickness in Inches | Wgt. per Linear Foot |
|---|---|---|
| ¾" | .293 | 4¾ lbs. |
| 1 " | .298 | 6 " |
| 1¼" | .319 | 7¾ " |
| 1½" | .386 | 11¼ " |
| 2 " | .504 | 19½ " |

## BRASS AND COPPER PIPE

———(Muntz Metal, High Brass and Admiralty Metal)———

| Pipe Size Inches | Diameter Actual Outside Inches | Actual Inside Inches | Thickness Inches | Pounds per Linear Foot | Red Brass Pounds per Linear Foot |
|---|---|---|---|---|---|
| ¾" | 1.050 | .822 | .1140 | 1.24 | 1.27 |
| 1 " | 1.315 | 1.062 | .1265 | 1.74 | 1.79 |
| 1¼" | 1.660 | 1.368 | .1460 | 2.56 | 2.63 |
| 1½" | 1.900 | 1.600 | .1500 | 3.04 | 3.13 |
| 2 " | 2.375 | 2.062 | .1565 | 4.02 | 4.14 |
| 2½" | 2.875 | 2.580 | .1875 | 5.83 | 6.00 |
| 3 " | 3.500 | 3.062 | .2190 | 8.31 | 8.56 |
| 3½" | 4.000 | 3.500 | .2500 | 10.85 | 11.17 |
| 4 " | 4.500 | 4.000 | .2500 | 12.29 | 12.66 |
| 5 " | 5.563 | 5.062 | .2500 | 15.40 | 15.85 |
| 6 " | 6.625 | 6.125 | .2500 | 18.44 | 18.99 |
| 8 " | 8.625 | 8.000 | .3125 | 30.05 | 30.95 |
| 10 " | 10.750 | 10.019 | .3655 | 43.91 | 45.20 |

## STANDARD WEIGHTS AND DIMENSIONS OF WELDED AND SEAMLESS GALVANIZED STEEL PIPE

### "Standard" Pipe

| Size (Nominal Inside Diameter) Inches | Outside Diameter Inches | Number of Threads per inch | Thickness Inches | Weight of Pipe per Lin. Ft. Threaded and With Couplings, Lb. |
|---|---|---|---|---|
| ¾ | 1.050 | 14 | 0.113 | 1.13 |
| 1 | 1.315 | 11½ | 0.133 | 1.68 |
| 1¼ | 1.660 | 11½ | 0.140 | 2.28 |
| 1½ | 1.900 | 11½ | 0.145 | 2.73 |
| 2 | 2.375 | 11½ | 0.154 | 3.68 |
| 2½ | 2.875 | 8 | 0.203 | 5.82 |
| 3 | 3.500 | 8 | 0.216 | 7.62 |
| 3½ | 4.000 | 8 | 0.226 | 9.20 |
| 4 | 4.500 | 8 | 0.237 | 10.89 |
| 5 | 5.563 | 8 | 0.258 | 14.81 |
| 6 | 6.625 | 8 | 0.280 | 19.19 |
| 8 | 8.625 | 8 | 0.322 | 28.81 |
| 10 | 10.750 | 8 | 0.365 | 41.13 |

## STANDARD WEIGHTS AND DIMENSIONS OF GALVANIZED WELDED WROUGHT IRON PIPE

### "Standard" Weight Pipe

| Size (Nominal Inside Diameter) Inches | Outside Diameter Inches | Number of Threads per inch | Thickness Inches | Weight of Pipe per Lin. Ft. Threaded and With Couplings, Lb. |
|---|---|---|---|---|
| ¾ | 1.050 | 14 | 0.115 | 1.13 |
| 1 | 1.315 | 11½ | 0.136 | 1.68 |
| 1¼ | 1.660 | 11½ | 0.143 | 2.28 |
| 1½ | 1.900 | 11½ | 0.148 | 2.73 |
| 2 | 2.375 | 11½ | 0.158 | 3.68 |
| 2½ | 2.875 | 8 | 0.208 | 5.82 |
| 3 | 3.500 | 8 | 0.221 | 7.62 |
| 3½ | 4.000 | 8 | 0.231 | 9.20 |
| 4 | 4.500 | 8 | 0.242 | 10.89 |
| 5 | 5.563 | 8 | 0.263 | 14.81 |
| 6 | 6.625 | 8 | 0.286 | 19.19 |
| 8 | 8.625 | 8 | 0.329 | 28.81 |
| 10 | 10.750 | 8 | 0.372 | 41.13 |

## CEMENT LINED STANDARD WROUGHT IRON AND STEEL PIPING

| Standard Pipe Size—Inches | Minimum Diameter With Cement Lining—Inches | Minimum Thickness of Lining—Inches |
|---|---|---|
| 1 | .804 | .06 |
| 1¼ | 1.1 | .08 |
| 1½ | 1.33 | .08 |
| 2 | 1.67 | .10 |
| 2½ | 2.07 | .10 |
| 3 | 2.60 | .125 |
| 3½ | 3.07 | .125 |
| 4 | 3.48 | .156 |
| 5 | 4.37 | .187 |
| 6 | 5.25 | .25 |
| 8 | 7.15 | .25 |
| 10 | 9.04 | .312 |

## COPPER TUBING

| Diameter Inches Equivalent Iron Pipe Size | Actual Outside | Actual Inside | Thickness Inches | Thickness BWG Equivalent | Nominal Weight per foot Pounds |
|---|---|---|---|---|---|
| ¾ | ⅞ | .745 | .065 | 16 | .640 |
| 1 | 1⅛ | .995 | .065 | 16 | .838 |
| 1¼ | 1⅜ | 1.245 | .065 | 16 | 1.036 |
| 1½ | 1⅝ | 1.495 | .072 | 15 | 1.360 |
| 2 | 2⅛ | 1.959 | .083 | 14 | 2.062 |

## EXTRA HEAVY GALVANIZED IRON PIPE

| Nominal Size | Diameters Inside | Outside | Lbs. per Linear Foot |
|---|---|---|---|
| 1 " | .951" | 1.315" | 2.17 |
| 1¼" | 1.272" | 1.660" | 3.0 |
| 1½" | 1.494" | 1.900" | 3.63 |
| 2 " | 1.933" | 2.375" | 5.02 |
| 2½" | 2.315" | 2.875" | 7.67 |
| 3 " | 2.892" | 3.5 " | 10.25 |
| 3½" | 3.364" | 4.00 " | 12.51 |
| 4 " | 3.818" | 4.5 " | 14.97 |
| 6 " | 5.751" | 6.625" | 28.58 |
| 8 " | 7.625" | 8.625" | 43.0 |
| 10 " | 9.75 " | 10.750" | 54.25 |
| 12 " | 11.75 " | 12.750" | 65.0 |

## CAST IRON PIPE (CLASS "B" CORPORATION)

| | | Weight—Lbs. | |
|---|---|---|---|
| Size | Thickness | Per Foot | Per 12' Length |
| 3" | .42" | 16.2 | 194 |
| 4" | .45" | 21.7 | 260 |
| 6" | .48" | 33.3 | 400 |
| 8" | .51" | 47.5 | 570 |
| 10" | .57" | 63.8 | 765 |
| 12" | .62" | 82.1 | 985 |

Cast iron pipe shall be coated inside and outside with coal tar pitch.

## LEAD ALLOY PIPE

| Nominal Size | Inside Diameter | Outside Diameter | Wall Thickness | Weight Pounds Per Foot |
|---|---|---|---|---|
| ¾" | .815" | 1.125" | .155" | 2.26 |
| 1 " | 1.050" | 1.375" | .1625" | 3.02 |
| 1¼" | 1.281" | 1.625" | .1719" | 3.82 |
| 1½" | 1.688" | 2.125" | .2188 | 6.34 |
| 2 " | 2.094" | 2.625" | .2656" | 9.66 |

## LEAD ALLOY TUBING—"TYPE K"

| Nominal Size | Inside Diameter | Outside Diameter | Wall Thickness | Weight Pounds Per Foot |
|---|---|---|---|---|
| ¾" | .695" | .875" | .090" | 1.082 |
| 1 " | .900" | 1.125" | .1125" | 1.77 |

**Specifications, Pipe and Fittings.**

156. Lead pipe shall be 99.7% pure lead, with a maximum zinc content of 0.002%. It shall be cold drawn to size, of uniform gauge and wall thickness throughout and shall be free from cracks, seams, slivers, laminations, cold joints, pits, pressure joints, scale, obstructions or other surface defects.

It shall withstand internal cold water hydrostatic tests in conformity with the requirements of specification 32-P-14:38T of the Department of Purchase, as follows:

For AA pipe—500 lbs. per square inch
For AAA pipe—700 lbs. per square inch

Pipe shall be stamped with the manufacturer's name, brand or trademark at least every 12 inches along the pipe and the class symbol (AA or AAA) and the inside diameter shall be stamped at least once on each coil or length.

157. Brass pipe may be of Muntz metal, high brass, Admiralty metal or red brass, conforming to Specification 32-P-3:38T of the Department of Purchase for seemless brass pipe and nipples.

158. Copper tubing shall be cold drawn to size. It shall be deoxidized with phosphorous and shall have a purity of at least 99.90 per cent as determined by electrolytic assay, silver being counted as copper. It shall be sound and of a uniform thickness throughout, free from cracks, seams, slivers, scale and other surface defects and shall withstand an internal hydrostatic pressure test of 700 pounds per square inch.

159. Galvanized steel pipe shall be the best grade of seamless or lap welded pipe. Galvanized wrought iron pipe shall be of genuine wrought iron without a mixture of iron scrap or steel in its manufacture. Pipe shall conform with Department of Purchase specification No. 32-P-2F (Steel Pipe) or No. 32-F-1D (Wrought Iron Pipe) and shall withstand an internal hydrostatic test pressure of 700 pounds per square inch.

Galvanizing shall be by the hot process and shall be applied both inside and outside the pipe. The zinc coating shall average at least two (2) ounces per square foot and shall be smooth, continuous and entirely free of pin holes, bare spots and blisters.

160. Cast iron pipe and fittings shall conform to Class B, or heavier pipe in the standard specifications of the American Water Works Association as adopted May 12, 1918.

161. Fittings for copper tubing and APPROVED LEAD ALLOY PIPE AND TUBIING shall be of a pattern approved by the department and shall be of brass having a minimum copper content of eighty-five per cent. They shall be free from sand holes and all surface defects inside and outside.

162. Brass fittings shall be standard thread fittings, of malleable standard beaded pattern, with a minimum copper content of 85%. They shall be free from all surface defects and sand holes and shall conform to Specification 32-F-1:38T of the Department of Purchase.

163. Extra heavy and Standard Galvanized Iron Pipe fittings shall be of malleable iron pattern with standard threads and shall conform to Specification 32-F-2 :38T of the Department of Purchase.

164. Lead Lined Fittings shall be of standard malleable iron pattern so recessed as to prevent collapsing of the lead linings, and fittings shall be so lined that the iron will not contact the water at any point when made up to thread of piping. The mixture for lining shall be of pure lead with not more than 2% of antimony or zinc. The thread of the fittings and the thread of the pipe shall be coated with a preparation of boiled oil and cement, litharge and glycerine or other approved mixture before being made up and all exposed threads on the pipe after the fitting has been made up shall be substantially coated with either of the aforesaid mixtures to prevent corrosion at this point.

**High Pressure Services.**

165. Where lead pipe is used for a service in which the pressure is 70 pounds per square inch or more, such lead shall be in conformity with specifications for AAA lead pipe.

**Wiped Joints.**

166. All conections between lead and iron pipes shall be made with extra heavy brass soldering nipples and "wiped" solder joints. Connections between lead pipes and lead, brass and copper pipes shall be made by means of wiped solder joints not less than 2½ inches in length, properly prepared, tinned and fused. All joints shall be uniform and of the size known to the plumbing trade as "Heavy." All wiped joints shall be made by use of pot, ladle and cloth. Use of a torch to accomplish the wiping of a solder joint will not be permitted except by authorization of the department when conditions make the use of pot, ladle and cloth impracticable. The solder used shall be of the grade known as "half and half," "warranted" or "Extra fine" and the outside diameter of the wiped joint at the center shall be at least ¾ inch in excess of the outside diameter of the lead, brass or copper pipe. Soldering nipples shall be of extra heavy cast brass or thoroughly annealed seamless drawn extra heavy brass pipe tubing of standard iron pipe gauge.

**Caulked Joints.**

167. The caulked joints for cast iron service pipes shall be made as follows. The inner portion of the annular space between the spigot and the hub shall be first packed with clean, sound jute packing yarn free from tar. The remaining space in the hub shall then be run full of lead at one pouring and joints shall be well caulked with proper tools and made watertight. In pouring joints, sufficient metal shall be provided so that when the joint is caulked the lead shall be flush with the face of the hub. The lead used shall be of the best quality pure soft lead practically free from all impurities. No cold lead shall be used for caulking or filling in. The depth of lead joints up to 8-inch pipe shall be 2⅜ inches and for larger pipe it shall be three inches. If, in the opinion of the Borough Engineer, sub-surface conditions make it necessary to use a lead joint with the face of the bell of the pipe facing downward, the joint shall either be run and caulked on the bank or, if necessary, to be made in place, shall be caulked with lead wire or lead wool for the full depth of the bell. Flexible joints,

approved by the department, may be ordered by the Borough Engineer on any service installation, when subsurface conditions warrant this type of joint. On cast iron services the joint inside the building wall or meter pit may be a flange type.

**House Control Valves.**

168. The house control valve shall be placed in the servvice pipe within 2 feet of the point of its entry in the building wall and shall be of the gate type and shall be so located as to be accessable at all times. All valves shall be of 150 lbs. minimum working pressure as specified in the manufacturer's catalogue and may be of the outside stem and yoke type.

**Curb Valves.**

169. Curb valves shall be installed on all fire service pipes. Curb valves shall be installed on all other service pipes over 2 inches in diameter.

On service pipes 2 inches or less in diameter the curb valves and boxes may be set at the option of the owner. The curb valves shall be set in the service pipe at or within 2 feet of the curb. Curb valves shall be of the gate type, non-rising stem valve, designed for a minimum of 150 pounds per square inch working pressure.

Access to all curb valves installed shall be provided by a tar coated iron extension box with cover, the cover to be flush with the sidewalk level. Curb valves 2 inches and less in diameter may be equipped with a wheel for operation, provided a permanent ½-inch iron rod is attached thereto and extended to the top of the curb box. No curb valve shall be installed in a driveway.

Curb valves larger than 2 inches in diameter shall be equipped with an operating nut at least 1¼″ square and no extension rod need be attached thereto. Such operating nut may be installed on curb valves 2 inches and less in diameter at the option of the owner.

In sprinkler and fire line installations, the location of the sidewalk control valve will be governed by Sections C26-1346.0, Par. B & C and C26-1407.0—No. 2 of Paragraph A of the Administrative Code.

**Services to Be Straight.**

170. Each new service pipe shall be laid in a straight line at right angles to the street main and extending from the tap to the main house control valve. Where the surface or subsurface conditions make it impracticable to install a service pipe in accordance with the above conditions, it may be otherwise laid, provided the plumber submits and procures the written approval of the department for a plan showing the proposed alternative location of the service pipe. The driving of a service pipe through the ground is prohibited.

**Gooseneck on Service Pipe.**

171. Each lead and copper tubing service pipe shall have an excess of at least three feet of pipe formed in a gooseneck at the connection to the tap and laid to the right hand, facing the tap. Each brass, copper, galvanized iron and cement lined standard iron service shall have, at the tap or wet connection, a lead or copper tubing gooseneck, or an offset swing joint consisting of four elbows and three pieces of pipe each not less than 2 feet in length, laid to the right side facing the connection. Connections to the city main by cast iron pipe may be made direct; no offset swing joint will be required.

**Cover for Service Pipe.**

172. All services shall be laid at a depth of at least 4 feet below street grade. Where, because of ducts or other subsurface conditions, a service pipe has less than 4 feet of cover, it should be protected by a covering of felt and tar paper or other suitable insulating and waterproof material securely fastened with brass bands or copper wire. The thickness of the protective covering is to be determined by the department and if conditions so warrant, a further protection shall be installed in the form of a steel sleeve or plate, as may be required.

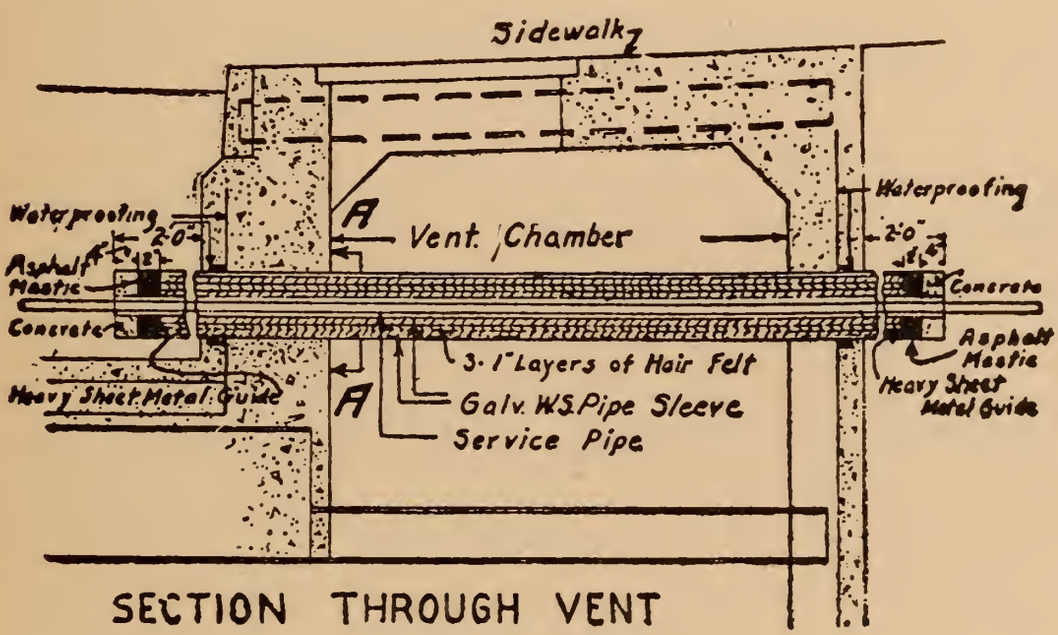
A service pipe shall not be laid within 6 inches of any other subsurface structure, conduit or pipe, nor directly below and parallel with such subsurface structure, conduit or pipe.

**Service in Sewer Trench.**

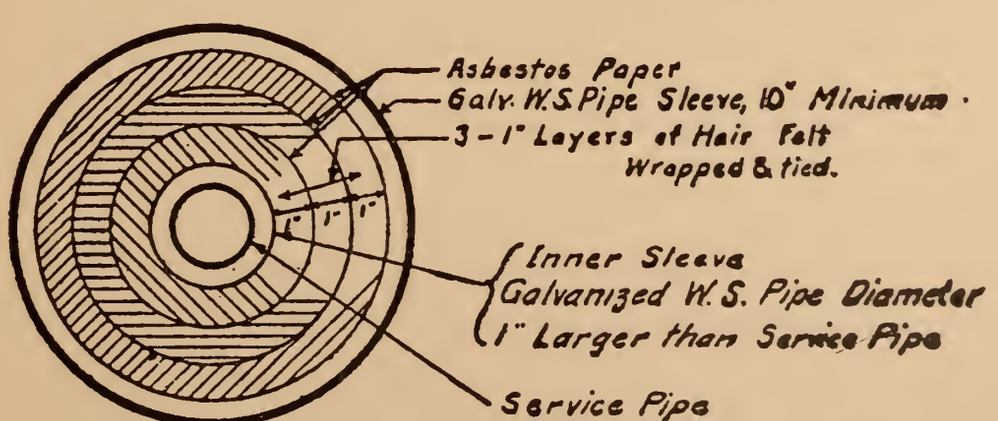
173. Service pipe laid in a sewer or construction trench shall be satisfactorily protected from settlement by supports or by securely benching the service in side earth wall.

**Service in Subway Air Vent.**

174. Where service pipe is installed through a subway air vent or similar construction, the method of installation shall be made as illustrated below:




SECTION THROUGH VENT




SECTION A-A

**Backfill.** 175. After a tap has been inserted or service pipe installed, the backfill around and one foot over the main and service shall be of clean earth, free from stone and carefully tamped under and around the main and service. The remainder of the backfill shall be free from stones larger than 6 inches in diameter and shall be satisfactorily compacted either by tamping or flushing, or both.

**Test of Service Pipe.** 176. Each new service pipe or repaired service pipe shall be subjected by the plumber, in the presence of the tapper or inspector, to a water test under the main pressure. All pipes and appurtenances shall remain uncovered for the duration of the test and shall show no sign of leakage. When any question arises as to the installation being in conformity with these regulations, internal hydrostatic test as specified for materials may be applied, subject to the discretion of the department.

**Minimum Diameters of Service Pipes.** 177. The minimum diameter of a service pipe controlled by taps ⅝-inch in diameter to and including 1½ inches in diameter shall be at least one standard size larger than the tap controlling it. Service pipes connected to taps 2 inches in diameter or larger shall be at least the same size as the tap or wet connection.

**Maximum Diameters of Service Pipes.** 178. The maximum sizes of service pipes allowed are as follows:

| Diameter of Tap | Diameter of Service Pipe |
|---|---|
| ⅝" | 1¼" |
| ¾" | 1½" |
| 1 " | 2 " |
| 1½" | 2½" |
| 2 " or wet connection | 3 " |
| 3" " " | 4 " |
| 4" " " | 6 " |
| 6" " " | 8 " |
| 8" " " | 10 " |

On wet connections larger than those listed, the service pipe shall be the same size as the wet connections.

**Minimum Size of Goosenecks.** 179. Where the service pipe is larger than the controlling tap, the minimum size of the gooseneck between the service and the tap shall be as follows:

| Size of Tap | Size of Service | Minimum Size of Gooseneck |
|---|---|---|
| 5/8" | 3/4" | 3/4" |
| 5/8" | 1 " | 3/4" |
| 5/8" | 1 1/4" | 1 " |
| 3/4" | 1 " | 3/4" |
| 3/4" | 1 1/4" | 1 " |
| 3/4" | 1 1/2" | 1 1/4" |
| 1 " | 1 1/4" | 1 " |
| 1 " | 1 1/2" | 1 1/4" |
| 1 " | 2 " | 1 1/2" |
| 1 1/2" | 2 " | 1 1/2" |
| 1 1/2" | 2 1/2" | 2 " |
| 2 " | 2 1/2" | 2 " |
| 2 " | 3 " | 2 " |

In connections over 2 inches in diameter, the gooseneck may be the same diameter as the tap.

**Size of Service for Domestic Consumption.** 180. In buildings occupied for domestic purposes, the minimum size of service shall be regulated by the number of families supplied as follows:

| Number of Families | Minimum Size Service |
|---|---|
| 1 and 2 | 3/4" |
| 3 to 5 | 1 " |
| 6 to 10 | 1 1/4" |
| 11 to 20 | 1 1/2" |
| 21 to 30 | 2 " |
| 31 to 45 | 2 1/2" |
| 46 to 60 | 3 " |
| 61 to 120 | 4 " |

A building housing families in excess of those listed above shall be supplied by a service proportioned to the number of families to be served.

181. Where the minimum size services for a specified number of families requires a tap in excess of that allowed on the floor area basis, the regulations relating to minimum size services shall supersede that of the floor area basis regulation.

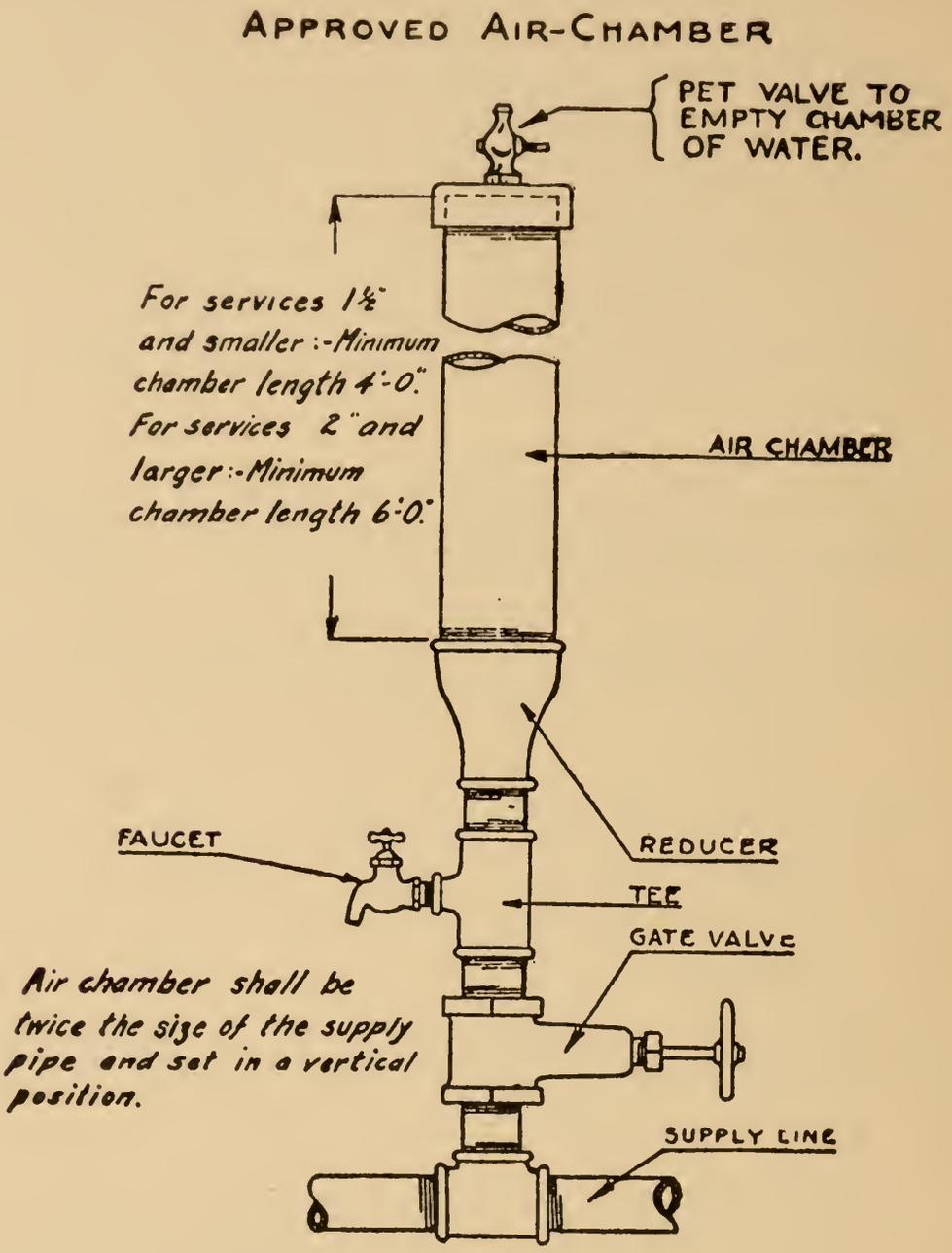
**Suction Tank.** 182. A pump with an intake diameter of 4 inches or larger shall not be connected directly to the city main and shall be equipped with a surge or suction tank. This regulation will not apply to fire pumps.

**Air Chamber.** 183. Where flushometers, suction tanks, other fixtures or piping, are equipped with quick closing valves and are supplied by direct street pressure in excess of 70 pounds, an air chamber of an approved type shall be installed within two feet of the house control valve or meter in the service near the point of entry. Where water hammer conditions exist in any installation, regardless of the pressure obtaining, an air chamber of an ap-

proved type shall be installed where and as directed by the Chief Inspector or Borough Engineer.

## APPROVED TYPE AIR-CHAMBER

(See Sketch following)




**Service Check Valve.**

184. A check valve shall be placed in all services where the following conditions exist:

(1) Where a building is supplied by services connected to different mains.

(2) Where there is any possibility of backflow from tanks, siamese connections or other apparatus or fixtures within the building.

Such check valves shall be placed within 2 feet of the outlet side of the main house control valve and on metered connections between the meter and the outlet valve.

185. When a meter equipped with a check valve or check valves, to prevent backflow of water, is set on a service, a separate check

valve is not required. Where such meter is removed, a check valve shall be installed in the service pipe until the meter is reset.

**Hot Water Check.** 186. Water supply lines to hot water boilers, steam boilers or similar fixtures or apparatus through which there might occur a backflow of hot water or steam, shall be equipped with a check valve, on the outlet side of which a relief valve shall be installed.

**Service Repairs.** 187. If a repair requires the necessity for the replacement of more than one-half of the service pipe, and the old service or remainder thereof is not in conformity with these regulations, an entire new service shall be installed to conform with the rules relating to new service pipe; if less than one-half requires replacement, the new section installed shall conform to the rules governing new services.

**Repairs to Gooseneck.** 188. When a repair to service pipe involves the uncovering of the tap, and the gooseneck or offset swing is found to be insufficient or is lacking, a proper gooseneck or offset swing joint shall be installed.

**Emergency Repairs.** 189. A licensed plumber may render emergency assistance in cases where an accident to a service or meter involves damage or leakage of water supply but shall obtain all necessary regular permits as soon thereafter as is possible. Where it is necessary to open a street to render such assistance, the plumber shall obtain an emergency permit from the Police Precinct Commander.

**Service Pipe Damaged by Electrolysis, Galvanic Action, Etc.** 190. When a service pipe is damaged by electrolysis, galvanic action or other local condition, it shall be repaired and protected against such damage in the future, at the owner's expense, in a manner satisfactory to this department.

**Electrical Thawing.** 191. Thawing of water services or mains by the use of electric current shall be performed only under special permit of this department and through the agency of a licensed electrician, an electric utility corporation or other individual or corporation having qualifications and equipment approved by this department. The operation of thawing services shall be supervised by an inspector assigned by the department who shall be paid by the permittee at the rate of $10. per day of eight (8) hours or a minimum charge of $5. if his services are required for one (½) day or less.

**Private Mains.** 192. Permits for the installation or the maintenance of a private main to any property, whether such private main is laid in a public or private street, will be issued subject to the following restrictions and terms:

A. There shall be filed by the owner or owners installing the private main an agreement to the effect that any property facing the street, road or right-of-way in which the main is installed will

be entitled to connect to the private main upon the owner of such property sharing with the owner or owners of the private main the cost of the installation of the private main.

B. Owners of the private main shall be responsible for the maintenance and repair of the private main and for any expense incurred to the City by reason of defects developing in the private main.

C. Private mains and all connections thereto and branches therefrom shall be installed or repaired only under permit and inspection of the department. Permits for connections, extensions or repairs subsequent to the original installation will be granted only upon the written consent of the owner or owners of the private main.

D. Private mains shall be at least 1 inch in diameter and may be of cast iron, standard galvanized iron, cement lined iron, lead, brass or copper pipe.

E. A private main shall be controlled by a gate valve placed on the building line of the street where it connects with the City main and a cast iron extension street box placed over the valve. An additional valve and box shall be installed to control each 1000 linear feet section of the private main and at each branch connection where a lateral private main is extended.

F. Tap, wet connections and service connections to private mains shall comply with regulations governing tap and service pipe installations, in force at the time of the installation.

**Plugging Private Main Service Connections.**

193. If a service connection to a private main is to be abandoned, it shall be disconnected at the tap or stop valve at the toe connection to the private main and a plug inserted. This work shall be performed at the owner's expense by a licensed plumber under permit from the department.

**Elimination of Private Mains, Driven Taps and Transferring of Taps and Services.**

194. The procedure to be followed in replacement of city mains and elimination of temporary or private water mains, driven taps and transferring services therefrom to city mains is:

A. Where it becomes necessary to lay, relay, lower or raise a water main due to the grading of the street, where such street was not previously at the established grade, necessitating the altering or extending of house services, the department will furnish a new tap to each property owner whose premises were connected directly with the main as previously laid. Reconnection of the service to the new tap and any extension of the service or the relaying of same as required by these rules shall be done by and at the expense of the owner. This requirement will not apply, however, where the owners affected have under an order from the department made a previous transfer of their services from a private or temporary main to a City owned main. In such instance the subsequent transfer of services to the

main laid, relaid, lowered, or raised on account of grading will be made by and at the expense of the City.

B. Where it becomes necessary to lay or relay a city main due to change in the established line or grade of a street, or for distribution purposes, the transferring of taps and connections to services to the extent necessary to restore the water supply will be done by and at the expense of the department. Where the service pipe has less than four feet of cover, the owner at his expense shall relay the service pipe with the minimum cover.

C. When a city water main is installed, all owners of houses fronting on the city main and receiving a supply from a private main shall disconnect their house services from the private main and connect with the city main. This work shall be done within 10 days or in such other period as may be specified by the department. A tap of the appropriate size will be provided and installed by the department without cost to the owner, provided the owner had previously paid the city for a tap or for permit for the tapping of the private main in an amount equivalent to the cost of the tap, but the expense of altering or connecting the house service pipe to the tap shall be borne by the owner. The tap by which the private main is attached will be removed and dismantled by the department without charge.

D. Where houses are served from a private main which is found to be leaking or frozen, or which is to be abandoned, and a city main exists in the street facing the premises, the owner or owners of premises served from said private main shall disconnect the service pipes from the private main and connect to a new tap or taps in the city main, in conformity with existing regulations, bearing all costs of tap installation and the expense of connecting service pipes thereto. The department will disconnect and plug the tap at its own expense when all services have been disconnected. Such work shall be done within such period as may be specified by the department.

E. No permit will be issued to alter or repair a private water main supplying buildings facing on a street in which a city main is in service. Notices shall be sent to the owners of such property to disconnect from the private main, separately connect to the city main, and the department will plug the tap controlling the private main at its expense. Penalty for failure to transfer house services under this regulation is provided in Section 734(4)-6.1 of the Administrative Code.

**Maintenance of Driven Tap.**

195. Where a driven tap is uncovered by a public service corporation, subway contractor or others, the public service corporation, contractor or others will be required to maintain and protect the tap or, if necessary replace same, until the time just prior to the backfilling of the excavation. At this time the department will replace, without cost, the driven tap with a screw tap, and connect to the existing service when, in the judgment of the department, such replacement is necessary.

**Approved Meters.**

196. The following meters are aproved for use in the City of New York.

| Name | Size | |
|---|---|---|
| Arctic Disc—Model A (frostproof) ..... | 5/8" to 2" | inclusive |
| American Disc ..... | 5/8" to 6" | " |
| Badger Disc (frostproof) ..... | 5/8" to 1¼" | " |
| Badger Disc ..... | 1½" to 4" | " |
| Badger Turbine (Current) ..... | 2 " to 12" | " |
| Crown (Rotary Piston) ..... | 5/8" to 6" | " |
| Empire No. 12 ..... | 5/8" to 1" | " |
| Empire Oscillating Piston—Model 9..... | 5/8" to 1" | " |
| Empire Oscillating Piston—Model 8..... | 1½" to 2" | " |
| Empire Oscillating Piston—Model AAX.. | 3 " to 6" | " |
| Eureka (Current)—Model B ..... | 2 " to 12" | " |
| Gamon Watch Dog Disc (frostproof) .... | 5/8" to 1" | " |
| Gamon Watch Dog Disc ..... | 1½" to 6" | " |
| Gamon Watch Dog (Current) ..... | 2 " to 8" | " |
| Gem (Current)—Model AAX ..... | 2 " to 12" | " |
| Hersey Detector (for fire lines only) ..... | 3 " to 12" | " |
| Hersey Disc—Models F-HF-FF ..... (frostproof) | 5/8" to 1" | " |
| Hersey Disc—Model ND ..... | 1½" to 3" | " |
| Hersey Disc—Model D ..... | 1¼" to 6" | " |
| Hersey Rotary Piston ..... | 5/8" to 6" | " |
| Hersey Torrent (Current) ..... | 2 " to 12" | " |
| Keystone Disc ..... | 5/8" to 6" | " (bronze) |
| Nash Disc—Model LR (frostproof bolts).. | 5/8" to 2" | " |
| Nash Disc—Model AAX ..... | 3 " to 6" | " |
| Phoenix Disc (frostproof) ..... | 5/8" to 1" | " |
| Phoenix Disc ..... | 1½" to 2" | " |
| Thomson Current ..... | 2 " to 10" | " |
| Thomson Disc ..... | 5/8" to 6" | " |
| Thomson Disc (frostproof) ..... | 5/8" to 1" | " |
| Trident Crest (Current) ..... | 2 " to 12" | " |
| Trident Disc (frostproof) ..... | 5/8" to 1" | " |
| Trident Disc ..... | 1¼" to 6" | " |
| Trident Protectus (for fire lines only)..... | 3 " to 10" | " |
| Worthington Disc—Model D ..... | 5/8" to 6" | " (bronze) |
| Worthington Disc—Model G ..... | 5/8" to 1" | " |
| Worthington Piston ..... | 5/8" to 6" | " |
| Worthington Turbine (Current)—..... Model 1H | 2 " to 12" | " |

All of the above meters shall conform to The American Water Works Association standards for water meters in respect to dial capacity, except that the minimum dial capacity shall be 1,000,000 cubic feet.

**Used Meters.**

197. No used or repaired meter shall be installed to cover a service at a new location unless specific request for the setting of such meter is made in writing by the owner of the property. Obsolete meters shall not be

reset at a new location, and can be repaired in their present setting only.

**Test.** 198. Before being installed, every new or repaired meter shall be sent to a designated department station for testing. To obtain new or repaired meter at the testing station, the plumber shall present department permit and order from meter company or meter repair company. All repaired meters delivered to the testing station for testing must be accompanied by a tag bearing the permit number, place installed, and any other pertinent information the department may require.

**Current Type Meter.** 199. The current type of water meter may be installed only upon approval of the Deputy Commissioner, Assistant to the Commissioner or the Chief Inspector, upon filing of satisfactory proof that the quantity of water required will be drawn at a rate to insure proper registration.

**Setting of Meters.** 200. In setting or resetting a meter, the requirements are as follows:

The meter shall be set so that the dial shall be faced upward and set horizontal and not more than 3 feet above the floor; a connection shall be made by coupling, union or flange union on both inlet and outlet end of meter and bored for sealing with holes not less than 3/32nds of an inch in diameter; a valve shall be set on service pipe on inlet side of meter within one foot of meter, except that when a current meter is set a straight section of pipe eight times the diameter of the meter shall be installed immediately before the inlet between the controlling valve and meter and no fittings of any kind will be permitted in this straight section of pipe; on all meters 1 inch or larger there shall be a valve on outlet side of meter in addition to the inlet valve; on 1¼-inch, 1½-inch and 2-inch meters a full sized tee shall be placed on the outlet between the meter and the outlet valve, with a short, capped nipple in the tee; on meters 3 inches and larger a tee with a 2-inch opening shall be placed on the outlet between meter and outlet valve, a short nipple in the tee and a 2-inch valve on the nipple. No connection shall be made to a test tee. In setting 3-inch and larger meters, the plumber shall file in duplicate for approval, a plan or sketch showing proposed installation, such plan or sketch to indicate location of service main control valve inside of the building, the distance of the meter from the point of entry of service, height from floor, size and type of meter and approximate date of setting. In all cases the meter location shall be to the satisfaction of the department. Unions or couplings are prohibited in the outlet piping of a meter that would permit removal of the meter setting without the breaking of the seal wiring. An additional tee and valve shall be inserted in the distribution line on outlet side of outlet valve of the meter to discharge water from the test meter where no other practical method can be used. All meters not equipped with test tee and outlet valve shall have a tee with faucet in same inserted in the line on the outlet side and within two feet of the meter, except that this rule may be waived where other convenient means are provided for testing to determine whether the meter is registering.

**Pits.** 201. No meter shall be set or reset in a pit within a building without the permission of the department. For 1-inch or smaller meters, the pit shall be not less than 2 feet, 6 inches wide by 3 feet, 6 inches long and shall be less than 4 feet in depth, and shall be provided with a cover so constructed as to permit of the entire pit being uncovered by one man. For larger meters, pits shall be of sufficient size to permit access to all portions of meter and connections, and if covered, shall be provided with an opening at least two feet square or 2 feet, 6 inches in diameter. The cover of such opening shall be provided with a suitable handle or grip and shall not be too heavy for one man to lift. Pits more than 4 feet in depth shall be provided with a permanent built-in ladder. Meter boxes approved by the department may be used. The pipe setting of meters 2 inches in diameter or less, set in pits, shall be installed within 2 feet of the top of the pit.

**Seals.** 202. No seal placed by the department for the protection of any meter, valve, fitting or other water connection shall be tampered with or defaced. It shall not be broken except on written authorization of the department. Where the seal is broken, the department reserves the right to order the meter removed for test at the expense of the consumer. It is a violation of Section 1432 of the Penal Code to break or deface or cause to be broken or defaced the seal of a water meter.

**Safeguarding Meters and Seals.** 203. The owner or consumer shall be responsible for safeguarding the meter and seal, and, if required by the department, he shall properly box and protect same. Meters shall be maintained in good working order at all times.

**Location of Meter.** 204. Meters shall be set or reset so that they may be easily examined and read. In all premises where the supply of water is to be fully metered, the meter shall be set within three feet of the building or vault wall at point of entry of service pipe. The service pipe between meter control valve and meter shall be kept exposed. When a building is situated back of the building line or conditions exist in a building that prevent the setting of the meter at a point of entry, meter may be set outside of the building in a proper watertight and frost-proof pit or meter box, or at other location approved by the Deputy Commissioner, Assistant to Commissioner, or the Chief Inspector.

**Removal Without Permit.** 205. If a meter shall have been disconnected without authority of permit, it shall not be reset until tested by the department.

**Maximum and Minimum Size.** 206. A meter shall be restricted to a size that will insure accurate registration on the basis of consumption and occupancy of the premises or portion of the premises metered. The meter in no case may be more than one standard size larger than the tap or connection to the city main.

**Meter Repairs.** 207. Meters removed from premises for repairs shall be delivered to the meter manufacturer or to a duly authorized meter repair company within three (3) days from date of issue of permit. The number, size and style must correspond with the information stated in the department permit.

**Completion of Repairs.** 208. Meter manufacturers and repair companies shall complete repairs to meters within two weeks of receipt of meters and forward them immediately to the Department Testing Station. Plumbers shall remove meters from the testing station and reset them within five (5) days after department notice of completion of test.

**Cold Water Meter Repairs.** 209. Cold water meters three inches in size and larger may be repaired on the premises. All meters repaired on premises are to be set at zero, the repair company to furnish index before repairs, with certification that meter had been reset at zero after repairs were made. No hot water meters shall be repaired on the premises.

**Meter Glasses.** 210. Meter glasses will be placed on meters by the department upon payment of a fee of One Dollar ($1.00). Dirty glasses and dials will be cleaned and leaky spindles packed by department without charge.

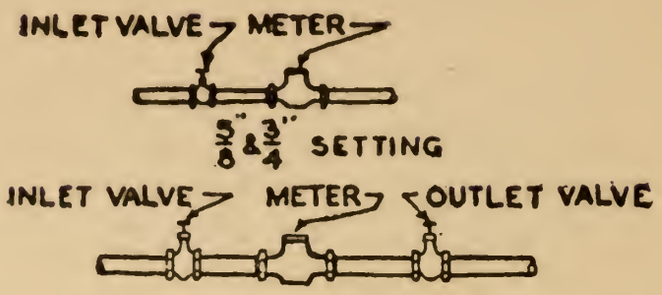
**Test of Private Meters.** 211. Private meters to be installed in buildings within the city will be tested at the Department's Testing Station upon payment of a fee of One Dollar ($1.00).

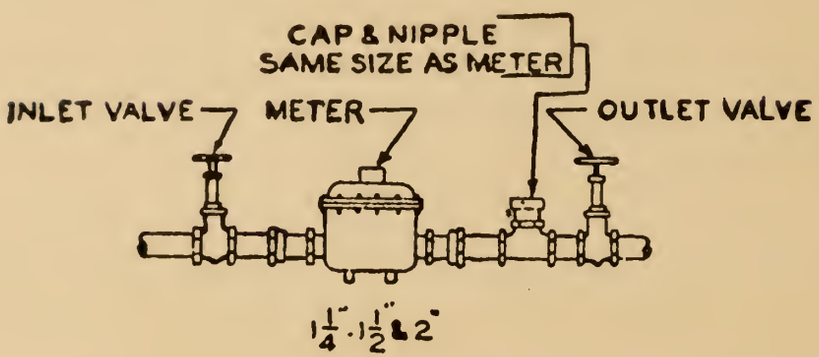
**Plumber Selected When Owner Neglects.** 212. The department may select and order a plumber, on failure of owner or occupant, to do the work indicated in department notice in respect to installation or repair of meters or correction of violations pertaining to metered connections, and all expense attached thereto will become a lien against the property, as provided for by Section 415-(1)-7.0 of the Administrative Code.

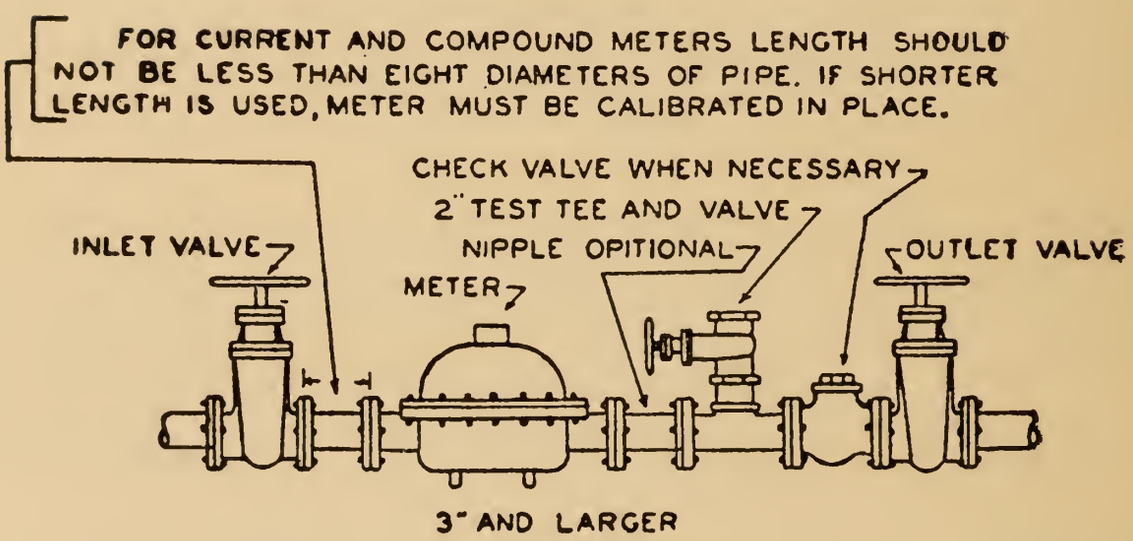
**Reduction in Size of Meter.** 213. Where inaccuracy of registration is found to be due to the improper size of the meter, such meter shall be replaced with a smaller meter of a size to be designated by the department. When such reduction of meter size is effected, the piping of the meter setting from the inlet valve to the outlet valve shall be of the same size as the meter.

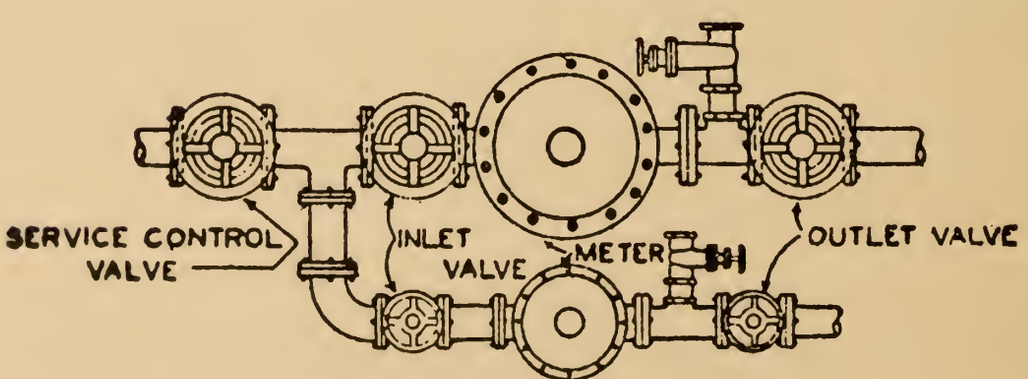
**Service Shutoff.** 214. In any premises where water is obtained through more than one meter, and where tests indicate that accurate registration is not being obtained by reason of the divided delivery of water through more than one meter, the Department reserves the right to shut off and seal one or more of the meters to insure accuracy of registration.

# TYPICAL METER SETTINGS

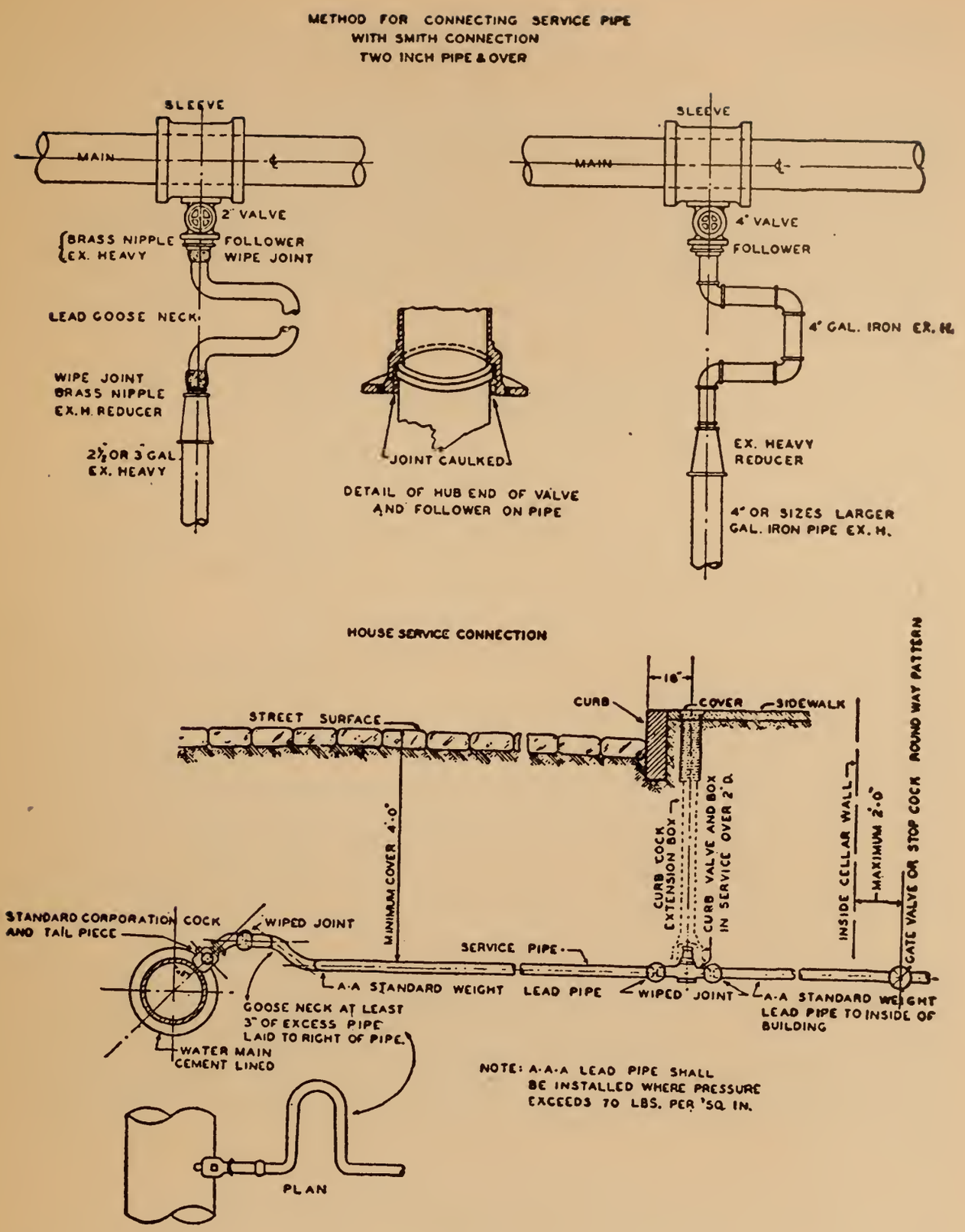



SETTING OF 2 OR MORE METERS ON A SINGLE SERVICE




**Miscellaneous Fixtures to Be Metered.**

215. A display fountain, aquarium, irrigation system, swimming tank, wading pool, plunge bath or other device requiring for its operation the use of city water shall not be installed or used except where the supply of water to the fixture or device is metered.

**Hose Bib or Outside Water Connection.**

216. The use of a hose bib or other outside connection for garden purposes, for watering lawn or for washing or flushing a sidewalk, stoop or areaway, is restricted to such use and to the period of each year as prescribed by Rule 34 of the Rules and Regulations Fixing Uniform Annual Charges and Extra and Miscellaneous Charges for the Supply of Water.

**Ball Stops and Roof Tank.** 217. Water supply inlets to roof tanks shall be located at least 2 inches above the overflow pipe level of the tank and shall be equipped with an automatic ball stop. The outlet from a roof tank to the distribution system in the building shall be effectively equipped to prevent solids from entering into such piping. All down feed supplies from a tank cross-connected in any manner with distribution supply piping in a building supplied by direct street main or pump pressure shall be equipped with check valve to prevent backflow of water into the roof tank.

**Hydrant Flow Test.** 218. A hydrant flow test to determine the residual pressure at a certain volume will be made at a designated point upon payment of $10.

**Deviation From Rules.** 219. If unusual subsurface or other conditions make it impractical in the opinion of the Bureau Head or Chief Inspector, to complete any installation in conformity with these rules and regulations, the work may be performed in such manner as directed.

**Violations.** 220. In case of violation of any of the preceding rules and regulations, or any of the laws or statutes relating to water supply, or if it shall be found that a meter has been tampered with, the water supply will be shut off unless such additional charges as the Commissioner may impose are paid promptly, nor will the supply be re-established except upon correction of the violation in conformity with department rules and upon payment of the expense of shutting off and turning on the water supply. Satisfactory assurance shall also be made that no future cause for complaint will be given.

**Penalties.** 221. Licensed plumbers guilty of violating any of the rules and regulations herein shall be prohibited from securing further permits from this department and where willful violations warrant, the Commissioner may prefer charges to the Department of Health for the revocation of a Master Plumber's license.

**Use of Fire Hydrants for Street Showers.** 222. (a) No street shower shall be operated when the temperature is less than 80 degrees F.

(b) Street showers shall be operated between the hours of 10 A.M. and 8 P.M. only, except when special permission is given.

(c) Size of pipe connection to the shower head shall not exceed 1″ in diameter.

(d) Hose or other connections to the hydrant shall be made in a manner to prevent leakage at the point of such connections and the shower and its connection must be kept in good repair at the expense of the Department or other agency maintaining the shower.

(e) Not more than one street shower shall be operated within one block.

(f) No shower shall be operated where it reduces the pressure in the city main to a point where a lack of water is experienced on the upper floors of the buildings within the block.

(g) This Department reserves the right to shorten the time or volume of operation of street showers where it causes a general reduction of pressure.

(h) The permit for opening the fire hydrant and using water therefrom for street shower is revocable and may be terminated at any time the preceding regulations are violated, or in the event of an emergency.

(i) The permittee shall indemnify and hold harmless the City of New York from all liability for damages of whatever nature by reason of the opening or use of the hydrant for the purpose for which the permit is issued.

**Use of Fire Hydrants for Other Purposes.**

223. The water obtained from the hydrants specified shall be used only for the purposes herein stated and in such a manner as to prevent all unnecessary waste. Connections with fire hydrants shall be made by valves or couplings which can be readily detached in case of emergency. All such connections shall be uncoupled immediately after water is used except where necessity requires the continued use of the hydrant throughout the whole day. Hydrants shall be protected from freezing or other damage. If damage to a hydrant results from use thereof repairs shall be made at the expense of the user. No hydrant is to be used when temperature is below 34° Fahrenheit.

Only hydrant wrenches of a design approved by the department shall be used. Water shall be obtained from the small size nozzle; the cap on the larger nozzle shall not be disturbed. Care shall be taken that the cap chains are not broken or caps lost. The cap shall be replaced after use of hydrant. No high pressure fire hydrant shall be opened. No hydrant shall be used which appears to be in a defective condition. If a hydrant is in a defective condition, the department should be notified immediately, giving the location thereof.

Fire hydrants are not to be obstructed by the users thereof, and shall be available at all times for use by the Fire Department.

The person or company to whom this permit is issued shall indemnify and hold the City of New York harmless from all liability or damage of whatever nature by reason of the opening or use of said hydrants or the use of water therefrom by any person, his agent, servants or employees.

The permittee agees to pay for all water used in connection with this permit at the established rates.

The person or company accepting this permit hereby agrees to pay the salary of an inspector to be assigned by the Commissioner of Water Supply, Gas and Electricity at the rate of $5.00 per day for the period for which this permit is issued.

The use of the Stillson wrench for opening fire hydrants is strictly prohibited.

This permit may be cancelled if any of the conditions herein mentioned are violated or for such other reasons as the Commissioner may consider adequate.

THIS PERMIT MUST BE RETAINED AT THE POINT WHERE WATER IS BEING USED.

Acting under authority of Paragraph 3, Section 734, Chapter 30 of the New York City Charter, I hereby establish, effective immediately, the two hundred and twenty-three rules and regulations as set forth herein.

JOHN M. CANNELLA,
Commissioner.
Department of Water Supply, Gas and Electricity.

**Dated January 1, 1948.**

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